

July 2015

Stock Market Simulation

Rong Tang
Worcester Polytechnic Institute

Follow this and additional works at: <https://digitalcommons.wpi.edu/iqp-all>

Repository Citation

Tang, R. (2015). *Stock Market Simulation*. Retrieved from <https://digitalcommons.wpi.edu/iqp-all/3124>

This Unrestricted is brought to you for free and open access by the Interactive Qualifying Projects at Digital WPI. It has been accepted for inclusion in Interactive Qualifying Projects (All Years) by an authorized administrator of Digital WPI. For more information, please contact digitalwpi@wpi.edu.



Stock Market Simulation

An Interactive Qualifying Project Report:

Submitted to the Faculty of

WORCESTER POLYTECHNIC INSTITUTE

in partial fulfillment of the requirements for the

Degree of Bachelor of Science

By

Rong Tang

Rong Tang

Submitted:

July 22, 2015

Approved by Professor Dalin Tang, Project Advisor

Abstract

Though the simulation technics and online resources, a five-week stock simulation was conducted to investigate the impacts of different trading methods on investment returns and profits. Several trading strategies were discussed and compared in this project. Experiences gained from this project are helpful for people to become competent investors in real life.

Acknowledge

I would like to thank the following people for their contributions and help to this IQP project: Dalin Tang, Project Advisor of Stock Market Simulation IQP, Worcester Polytechnic institute and my family members.

Table of Contents

ABSTRACT	II
ACKNOWLEDGE	III
TABLE OF CONTENTS	IV
TABLE OF FIGURES.....	VII
TABLE OF TABLES.....	IX
1. INTRODUCTION.....	- 1 -
1.1 GOALS, SCOPE, GENERAL PLAN	- 1 -
1.2 STOCK MARKET HISTORY	- 2 -
1.2.1 <i>The Origin of Stock</i>	- 2 -
1.2.2 <i>New York Stock Exchange</i>	- 2 -
1.2.3 <i>NASDAQ vs. NYSE</i>	- 3 -
1.2.4 <i>Reasons of People Buying Stocks and Companies Issuing Stock</i>	- 3 -
1.2.5 <i>Risks and Benefits of Stocks</i>	- 4 -
2. TYPES OF INVESTMENTS	- 6 -
2.1 INTRODUCTION.....	- 6 -
2.2 OWNERSHIP INVESTMENT	- 6 -
2.2.1 <i>Stocks</i>	- 6 -
2.2.2 <i>Real Estate</i>	- 7 -
2.2.3 <i>Precious Objects</i>	- 7 -
2.2.4 <i>Business</i>	- 7 -
2.3 LENDING INVESTMENT	- 7 -
2.3.1 <i>Bonds</i>	- 8 -
2.3.2 <i>CDs</i>	- 8 -
2.3.3 <i>TIPS</i>	- 8 -
2.4 CASH EQUIVALENTS	- 9 -
2.5 ALTERNATIVES	- 9 -
2.5.1 <i>REITs</i>	- 9 -
2.5.2 <i>Venture Capital</i>	- 9 -
2.5.3 <i>Commodities</i>	- 10 -
2.5.4 <i>Precious Metals</i>	- 10 -
2.6 FUNDS	- 10 -
2.6.1 <i>Mutual Funds</i>	- 10 -
2.6.2 <i>Index Funds</i>	- 11 -
2.6.3 <i>Exchange Traded Funds (ETFs)</i>	- 11 -
2.6.4 <i>Hedge Fund</i>	- 11 -
3. FACTORS IMPACTING STOCK PRICES	- 12 -
3.1 INTRODUCTION.....	- 12 -
3.2 FUNDAMENTAL FACTORS.....	- 12 -
3.3 TECHNICAL FACTORS	- 12 -
3.3.1 <i>Inflation</i>	- 12 -
3.3.2 <i>Economic Strength of Market and Peers</i>	- 13 -

3.3.3 Substitutes	- 13 -
3.3.4 Incidental Transactions	- 13 -
3.3.5 Demographics	- 13 -
3.3.6 Trends	- 14 -
3.3.7 Liquidity	- 14 -
3.4 MARKET SENTIMENT	- 14 -
4. TRADING STRATEGIES	- 16 -
4.1 INTRODUCTION	- 19 -
4.2 DAY TRADING	- 19 -
4.3 POSITION TRADING	- 19 -
4.4 SWING TRADING	- 19 -
4.5 SCALPING	- 19 -
4.6 DRAWBACKS OF ACTIVE TRADING STRATEGIES	- 19 -
4.7 SELECTION OF TRADING STRATEGIES	- 19 -
5. COMPANY PROFILES.....	- 19 -
5.1 EMC CORPORATION (EMC)	- 19 -
5.1.1 Company Profile	- 19 -
5.1.2 Key Statistics and Stock Market Performance.....	- 19 -
5.1.3 Analyst Opinion	- 20 -
5.2 AMDOCS LIMITED (DOX)	- 21 -
5.2.1 Company Profile	- 21 -
5.2.2 Key Statistics and Stock Market Performance.....	- 22 -
5.2.3 Analyst Opinion	- 23 -
5.3 VERIZON COMMUNICATIONS INC. (VZ)	- 24 -
5.3.1 Company Profile	- 24 -
5.3.2 Key Statistics and Stock Market Performance.....	- 24 -
5.3.3 Analyst Opinion	- 25 -
5.4 ORACLE CORPORATION (ORCL)	- 26 -
5.4.1 Company Profile	- 26 -
5.4.2 Key Statistics and Stock Market Performance.....	- 27 -
5.4.3 Analyst Opinion	- 28 -
5.5 CGI GROUP, INC. (GIB).....	- 29 -
5.5.1 Company Profile	- 29 -
5.5.2 Key Statistics and Stock Market Performance.....	- 29 -
5.5.3 Analyst Opinion	- 30 -
5.6 COGNIZANT TECHNOLOGY SOLUTIONS CORPORATION (CTSH)	- 31 -
5.6.1 Company Profile	- 31 -
5.6.2 Key Statistics and Stock Market Performance.....	- 31 -
5.6.3 Analyst Opinion	- 32 -
5.7 SYMANTEC CORPORATION (SYMC)	- 33 -
5.7.1 Company Profile	- 33 -
5.7.2 Key Statistics and Stock Market Performance.....	- 33 -
5.7.3 Analyst Opinion	- 35 -
6. COMPANY STOCK PERFORMANCES.....	- 36 -
6.1 Simulation Week #1.....	- 36 -

6.2 Simulation Week #2	- 43 -
6.3 Simulation Week #3	- 50 -
6.4 Simulation Week #4	- 57 -
6.5 Simulation Week #5	- 64 -
7. SIMULATION I—DAY TRADING STRATEGY	- 72 -
7.1 Simulation I Week #1 Result	- 72 -
7.2 Simulation I Week #2 Result	- 76 -
7.3 Simulation I Week #3 Result	- 81 -
7.4 Simulation I Week #4 Result	- 86 -
7.5 Simulation I Week #5 Result	- 91 -
8. SIMULATION II—SWING TRADING STRATEGY	- 72 -
8.1 Simulation II Week #1 Result	- 72 -
8.2 Simulation II Week #2 Result	- 72 -
8.3 Simulation II Week #3 Result	- 72 -
8.4 Simulation II Week #4 Result	- 72 -
8.5 Simulation II Week #5 Result	- 72 -
9. COMPARISON	- 72 -
10. CONCLUSION	- 72 -
REFERENCES	- 72 -

Table of Figures

FIGURE 5.1.1 EMC CORP. PORTFOLIO SUMMARY	- 20 -
FIGURE 5.1.2 EMC CORP. STOCK TREND IN 5 DAYS	- 20 -
FIGURE 5.1.3 EMC CORP. RECOMMENDATION SUMMARY	- 21 -
FIGURE 5.1.4 EMC CORP. RECOMMENDATION TRENDS	- 21 -
FIGURE 5.2.1 AMDOCS LIMITED PORTFOLIO SUMMARY	- 22 -
FIGURE 5.2.2 AMDOCS LIMITED STOCK TREND IN 5 DAYS	- 23 -
FIGURE 5.2.3 AMDOCS LIMITED RECOMMENDATION SUMMARY	- 23 -
FIGURE 5.2.4 AMDOCS LIMITED RECOMMENDATION TRENDS	- 23 -
FIGURE 5.3.1 VERIZON COMMUNICATIONS INC. PORTFOLIO SUMMARY	- 25 -
FIGURE 5.3.2 VERIZON COMMUNICATIONS INC. STOCK TREND IN 5 DAYS	- 25 -
FIGURE 5.3.3 VERIZON COMMUNICATION INC. RECOMMENDATION SUMMARY	- 26 -
FIGURE 5.3.4 VERIZON COMMUNICATION INC. RECOMMENDATION TRENDS	- 26 -
FIGURE 5.4.1 ORACLE CORP. PORTFOLIO SUMMARY	- 27 -
FIGURE 5.4.2 ORACLE CORP. STOCK TREND IN 5 DAYS	- 28 -
FIGURE 5.4.3 ORACLE CORP. RECOMMENDATION SUMMARY	- 28 -
FIGURE 5.4.4 ORACLE CORP. RECOMMENDATION TRENDS	- 28 -
FIGURE 5.5.1 CGI GROUP, INC. PORTFOLIO SUMMARY	- 29 -
FIGURE 5.5.2 CGI GROUP, INC. STOCK TREND IN 5 DAYS	- 30 -
FIGURE 5.5.3 CGI GROUP, INC. RECOMMENDATION SUMMARY	- 30 -
FIGURE 5.5.4 CGI GROUP, INC. RECOMMENDATION TRENDS	- 31 -
FIGURE 5.6.1 COGNIZANT TECH SOLUTIONS PORTFOLIO SUMMARY	- 32 -
FIGURE 5.6.2 COGNIZANT TECH SOLUTIONS STOCK TREND IN 5 DAYS	- 32 -
FIGURE 5.6.3 COGNIZANT TECH SOLUTIONS RECOMMENDATION SUMMARY	- 33 -
FIGURE 5.6.4 COGNIZANT TECH SOLUTIONS RECOMMENDATION TRENDS	- 33 -
FIGURE 5.7.1 SYMANTEC CORP. PORTFOLIO SUMMARY	- 34 -
FIGURE 5.7.2 SYMANTEC CORP. STOCK TREND IN 5 DAYS	- 34 -
FIGURE 5.7.3 SYMANTEC CORP. RECOMMENDATION SUMMARY	- 35 -
FIGURE 5.7.4 SYMANTEC CORP. RECOMMENDATION TRENDS	- 35 -
FIGURE 6.1.1 EMC CORP. STOCK JUNE 1 ST , 2015—JUNE 5 TH , 2015	- 36 -
FIGURE 6.1.2 AMDOCS LIMITED STOCK JUNE 1 ST , 2015—JUNE 5 TH , 2015	- 37 -
FIGURE 6.1.3 VERIZON COMMUNICATIONS INC. STOCK JUNE 1 ST , 2015—JUNE 5 TH , 2015	- 38 -
FIGURE 6.1.4 VERIZON COMMUNICATIONS INC. STOCK JUNE 1 ST , 2015—JUNE 5 TH , 2015	- 39 -
FIGURE 6.1.5 CGI GROUP INC. STOCK JUNE 1 ST , 2015—JUNE 5 TH , 2015	- 40 -
FIGURE 6.1.6 COGNIZANT TECHNOLOGY SOLUTIONS CORP. STOCK JUNE 1 ST , 2015—JUNE 5 TH , 2015	- 41 -
FIGURE 6.1.7 SYMANTEC CROP. STOCK JUNE 1 ST , 2015—JUNE 5 TH , 2015	- 42 -
FIGURE 6.2.1 EMC CORP. STOCK JUNE 8 TH , 2015—JUNE 12 TH , 2015	- 43 -
FIGURE 6.2.2 AMDOCS LIMITED STOCK JUNE 8 TH , 2015—JUNE 12 TH , 2015	- 44 -
FIGURE 6.2.3 VERIZON COMMUNICATIONS INC. STOCK JUNE 8 TH , 2015—JUNE 12 TH , 2015	- 45 -
FIGURE 6.2.4 VERIZON COMMUNICATIONS INC. STOCK JUNE 8 TH , 2015—JUNE 12 TH , 2015	- 46 -
FIGURE 6.2.5 CGI GROUP INC. STOCK JUNE 8 TH , 2015—JUNE 12 TH , 2015	- 47 -
FIGURE 6.2.6 COGNIZANT TECHNOLOGY SOLUTIONS CORP. STOCK JUNE 8 TH , 2015—JUNE 12 TH , 2015	- 48 -
FIGURE 6.2.7 SYMANTEC CROP. STOCK JUNE 8 TH , 2015—JUNE 12 TH , 2015	- 49 -

FIGURE 6.3.1 EMC CORP. STOCK JUNE 15 TH , 2015—JUNE 19 TH , 2015	- 50 -
FIGURE 6.3.2 AMDOCS LIMITED STOCK JUNE 15 TH , 2015—JUNE 19 TH , 2015	- 51 -
FIGURE 6.3.3 VERIZON COMMUNICATIONS INC. STOCK JUNE 15 TH , 2015—JUNE 19 TH , 2015	- 52 -
FIGURE 6.3.4 VERIZON COMMUNICATIONS INC. STOCK JUNE 15 TH , 2015—JUNE 19 TH , 2015	- 53 -
FIGURE 6.3.5 CGI GROUP INC. STOCK JUNE 15 TH , 2015—JUNE 19 TH , 2015	- 54 -
FIGURE 6.3.6 COGNIZANT TECHNOLOGY SOLUTIONS CORP. STOCK JUNE 15 TH , 2015—JUNE 19 TH , 2015	- 55 -
FIGURE 6.3.7 SYMANTEC CROP. STOCK JUNE 15 TH , 2015—JUNE 19 TH , 2015	- 56 -
FIGURE 6.4.1 EMC CORP. STOCK JUNE 22 ND , 2015—JUNE 26 TH , 2015	- 57 -
FIGURE 6.4.2 AMDOCS LIMITED STOCK JUNE 22 ND , 2015—JUNE 26 TH , 2015	- 58 -
FIGURE 6.4.3 VERIZON COMMUNICATIONS INC. STOCK JUNE 22 ND , 2015—JUNE 26 TH , 2015	- 59 -
FIGURE 6.4.4 VERIZON COMMUNICATIONS INC. STOCK JUNE 22 ND , 2015—JUNE 26 TH , 2015	- 60 -
FIGURE 6.4.5 CGI GROUP INC. STOCK JUNE 22 ND , 2015—JUNE 26 TH , 2015	- 61 -
FIGURE 6.4.6 COGNIZANT TECHNOLOGY SOLUTIONS CORP. STOCK JUNE 22 ND , 2015—JUNE 26 TH , 2015	- 62 -
FIGURE 6.4.7 SYMANTEC CROP. STOCK JUNE 22 ND , 2015—JUNE 26 TH , 2015	- 63 -
FIGURE 6.5.1 EMC CORP. STOCK JUNE 29 TH , 2015—JULY 2 ND , 2015	- 64 -
FIGURE 6.5.2 AMDOCS LIMITED STOCK JUNE 29 TH , 2015—JULY 2 ND , 2015	- 65 -
FIGURE 6.5.3 VERIZON COMMUNICATIONS INC. STOCK JUNE 29 TH , 2015—JULY 2 ND , 2015	- 66 -
FIGURE 6.5.4 VERIZON COMMUNICATIONS INC. STOCK JUNE 29 TH , 2015—JULY 2 ND , 2015	- 67 -
FIGURE 6.5.5 CGI GROUP INC. STOCK JUNE 29 TH , 2015—JULY 2 ND , 2015	- 68 -
FIGURE 6.5.6 COGNIZANT TECHNOLOGY SOLUTIONS CORP. STOCK JUNE 29 TH , 2015—JULY 2 ND , 2015	- 69 -
FIGURE 6.5.7 SYMANTEC CROP. STOCK JUNE 29 TH , 2015—JULY 2 ND , 2015	- 70 -

Table of Tables

TABLE 7.1.1 DAY TRADING TRANSACTION CHART IN DAY 1—WEEK #1.....	- 72 -
TABLE 7.1.2 DAY TRADING TRANSACTION CHART IN DAY 2—WEEK #1.....	- 73 -
TABLE 7.1.3 DAY TRADING TRANSACTION CHART IN DAY 3—WEEK #1.....	- 74 -
TABLE 7.1.4 DAY TRADING GAIN/LOSS CHART IN DAY 4—WEEK #1.....	- 75 -
TABLE 7.2.1 DAY TRADING TRANSACTION CHART IN DAY 1—WEEK #2.....	- 76 -
TABLE 7.2.2 DAY TRADING TRANSACTION CHART IN DAY 2—WEEK #2.....	- 77 -
TABLE 7.2.3 DAY TRADING TRANSACTION CHART IN DAY 3—WEEK #2.....	- 78 -
TABLE 7.2.4 DAY TRADING GAIN/LOSS CHART IN DAY 4—WEEK #2.....	- 79 -
TABLE 7.2.5 DAY TRADING GAIN/LOSS CHART IN DAY 5—WEEK #2.....	- 80 -
TABLE 7.3.1 DAY TRADING TRANSACTION CHART IN DAY 1—WEEK #3.....	- 81 -
TABLE 7.3.2 DAY TRADING TRANSACTION CHART IN DAY 2—WEEK #3.....	- 82 -
TABLE 7.3.3 DAY TRADING TRANSACTION CHART IN DAY 3—WEEK #3.....	- 83 -
TABLE 7.3.4 DAY TRADING GAIN/LOSS CHART IN DAY 4—WEEK #3.....	- 84 -
TABLE 7.3.5 DAY TRADING GAIN/LOSS CHART IN DAY 5—WEEK #3.....	- 85 -
TABLE 7.4.1 DAY TRADING TRANSACTION CHART IN DAY 1—WEEK #4.....	- 86 -
TABLE 7.4.2 DAY TRADING TRANSACTION CHART IN DAY 2—WEEK #4.....	- 87 -
TABLE 7.4.3 DAY TRADING TRANSACTION CHART IN DAY 3—WEEK #4.....	- 88 -
TABLE 7.4.4 DAY TRADING GAIN/LOSS CHART IN DAY 4—WEEK #4.....	- 89 -
TABLE 7.4.5 DAY TRADING GAIN/LOSS CHART IN DAY 5—WEEK #4.....	- 90 -
TABLE 7.5.1 DAY TRADING TRANSACTION CHART IN DAY 1—WEEK #5.....	- 91 -
TABLE 7.5.2 DAY TRADING TRANSACTION CHART IN DAY 2—WEEK #5.....	- 92 -
TABLE 7.5.3 DAY TRADING TRANSACTION CHART IN DAY 3—WEEK #5.....	- 93 -
TABLE 7.5.4 DAY TRADING GAIN/LOSS CHART IN DAY 4—WEEK #5.....	- 94 -
TABLE 8.1.1 SWING TRADING TRANSACTION CHART IN WEEK #1	- 95 -
TABLE 8.2.1 SWING TRADING TRANSACTION CHART IN WEEK #2	- 97 -
TABLE 8.3.1 SWING TRADING TRANSACTION CHART IN WEEK #3	- 99 -
TABLE 8.4.1 SWING TRADING TRANSACTION CHART IN WEEK #4	- 101 -
TABLE 8.5.1 SWING TRADING TRANSACTION CHART IN WEEK #5	- 103 -

1. Introduction

1.1 GOALS, SCOPE, GENERAL PLAN

The primary objective of this IQP is to develop fundamental understanding of stock market and investment concepts. I will investigate different trading strategies and run simulations to test if those strategies can be applied in short-term investment. The profits and losses of each stock will be evaluated to draw the conclusion of this project. The detailed explanation of this project's goals and plans follows.

The first goal is to understand the basic operations and concepts in stock market. It includes the history of stock market and various trading strategies people have developed over years. I will investigate and study strategies are more effectively applicable in short-term investment through the stock market simulation.

The second goal is to explore factors that impact the trends of stock market, which are fundamental factors, technical factors and market sentiment. Those factors and their effects on stock market will be explained in further chapters.

The third goal of this project is to identify which types of strategy are better to apply in certain industries. To make the simulation realistic, I will run the simulation starting with 100,000 dollars investment, and two effective trading strategies will be applied on each stock. By the end of the simulation, I will compare the usefulness and practical effectiveness of each strategy.

This simulation will last approximately five weeks, at which point I will evaluate the results of investing with each strategy. These overall results, as well as the week-to-week progress, will be documented and summarized in a report complete with graphical figures and explanations. In doing all of this, I will be able to accomplish the goals have been mentioned, as well as developing trading skills that will benefit for future investment activities.

1.2 STOCK MARKET HISTORY

Stock is a term used to symbolize an investor's ownership in a company. Those who own stock are commonly called stockholders or shareholders. As a shareholder, an investor theoretically owns a percentage of everything the company owns or owes. The company's profitability, or lack thereof, determines whether its stock is traded at a higher or lower price. While trading of debt and commodities has its origins in the Middle Ages, the modern concept of a stock market began in the late 16th century [1].

1.2.1 THE ORIGIN OF STOCK

Stock markets were started when countries in the New World began trading with each other. While many pioneer merchants wanted to start huge business, this required substantial amounts of capital that no single merchant could raise alone. As a result, groups of investors pooled their savings and became business partners and co-owners with individual shares in their businesses to form joint-stock companies. Originated by the Dutch, joint-stock companies became a viable business model for many struggling businesses. In 1602, the Dutch East India Co. issued the first paper shares. This exchangeable medium allowed shareholders to conveniently buy, sell and trade their stock with other shareholders and investors [1].

1.2.2 NEW YORK STOCK EXCHANGE

The history of the New York Stock Exchange begins with the signing of the Buttonwood Agreement by twenty-four New York City stockbrokers and merchants on May 17, 1792, outside at 68 Wall Street under a Buttonwood tree [2]. On March 8, 1817, the group renamed itself the New York Stock and Exchange Board and moved off the street into 40 Wall Street [1]. The exchange's location, more than anything else, led to the dominance that the NYSE quickly attained. It was in the heart of all the business and trade coming to and going from the United

States, as well as the domestic base for most banks and large corporations. By setting listing requirements and demanding fees, the New York Stock Exchange became a very wealthy institution [3].

1.2.3 NASDAQ vs. NYSE

The NASDAQ was the brainchild of the National Association of Securities Dealers (NASD)—now called the Financial Industrial Regulatory Authority (FINRA). From its inception, it has been a different type of stock exchange. It does not inhabit a physical space, as with 11 Wall Street. Instead, it is a network of computers that execute trades electronically [3].

The fundamental difference between the NYSE and NASDAQ is in the way securities on the exchanges are transacted between buyers and sellers. The NASDAQ is a dealer's market, wherein market participants are not buying from and selling to one another directly but through a dealer, who, in the case of the NASDAQ, is a market maker. The NYSE is an auction market, wherein individuals are typically buying and selling between one another and there is an auction occurring; that is, the highest bidding price will be matched with the lowest asking price [4].

1.2.4 REASONS OF PEOPLE BUYING STOCKS AND COMPANIES ISSUING STOCK

Investors buy stocks for various reasons, and there are the U.S. Securities and Exchange Commission has listed three reasons. First reason is capital appreciation, which occurs when a stock rises in price. Second reason is dividend payments, which come when the company distributes some of its earnings to stockholders. The last reason is ability to vote shares and influence the company.

Companies issue stock to get money for various purposes, including paying off debt, launching new products, expanding into new markets or regions, and enlarging facilities or building new ones [5].

1.2.5 RISKS AND BENEFITS OF STOCKS

As the U.S. Securities and Exchange Commission explains, there are several benefits and risks associated with stocks. Stocks offer investors the greatest potential for growth (capital appreciation) over the long haul. Investors are willing to stick with stocks over long periods of time, generally have been rewarded with strong, positive returns. However stock prices move down as well as up. There is no guarantee that the company whose stock investors hold will grow and do well, so the investors can lose money when they invest in stocks.

If a company goes bankrupt and its assets are liquidated, common stockholders are the last in line to share in the proceeds. The company's bondholders will be paid first, the holders of preferred stock. If an investor is a common stockholder, he or she will receive whatever is left, which may be nothing.

Even when companies are not in danger of failing, their stock price may fluctuate up and down. Large company stocks as a group, for example, have lost money on average about one out of every three years. If investors have to sell shares on a day when the stock price is below the price they paid for the shares, they will lose money on the sale.

Market fluctuations can be unnerving to some investors. A stock's price can be affected by factors inside the company, such as a faulty product, or by events the company has no control over, such as political or market events.

In addition, stocks usually are one part of an investor's holdings. If investors are young and saving for a long-term goal such as retirement, they may want to hold more stocks than bonds. Investors nearing or in retirement may want to hold more bonds than stocks. The risks of stock holdings can be offset in part by investing in a number of different stocks. Investing in other kinds

of assets that are not stocks, such as bonds, is another way to offset some of the risks of owning stocks [5].

2. Types of Investments

2.1 INTRODUCTION

In a financial context, an appropriate definition for investment is the act of placing capital into a project or business with the intent of making a profit on the initial placing of capital. An investment may involve the extension of a loan or line of credit, which entitles one or repayment with interest, or it may involve buying an ownership stake in a business, with the hope that the business will become profitable. Investing may also involve buying a particular asset with the intent to resell it later for a higher price. Many types of investing exist, and each is subject to greater or lesser regulation in the jurisdiction in which it takes place. Legally, investing requires the existence and protection of individual property rights. Investing wisely requires a combination of astuteness, knowledge of the market, and timing. According to Investopedia, investments can be broken into three basic groups: ownership, leading and cash equivalents. However, there are other alternative investment options, as well as funds.

2.2 OWNERSHIP INVESTMENT

Ownership Investments are the most volatile and profitable class of investment, including stocks, real estate, precious objects, and business [6].

2.2.1 STOCKS

Stock is a type of security that signifies ownership in a corporation and represents a claim on part of the corporation's assets and earnings, and is also known as "shares" or "equity".

There are two main types of stock: common and preferred. Common stock usually entitles the owner to vote at shareholders' meetings and to receive dividends. Preferred stock generally does not have voting rights, but has a higher claim on assets and earnings than the common shares.

For example, owners of preferred stock receive dividends before common shareholders and have priority in the event that a company goes bankrupt and is liquidated [7].

2.2.2 REAL ESTATE

Real estate that generates income or is otherwise intended for investment purposes rather than as a primary residence. It is common for investors to own multiple pieces of real estate, one of which serves as a primary residence, while the others are used to generate rental income and profits through price appreciation. The tax implications for investment real estate are often different than those for residential real estate [7].

2.2.3 PRECIOUS OBJECTS

Precious objects are items that are generally small in size but highly valuable in monetary terms, and they can be considered an ownership-type of investment if the intention is to resell them for a profit. The important precious objects are: gold and silver, precious stones and art objects [7].

2.2.4 BUSINESS

Business investment is putting money or time toward starting a person's own business—a product or service meant to earn a profit—is another type of ownership investment [7].

2.3 LENDING INVESTMENT

Lending investments allow investors to be the bank. These investments tend to be lower risk than ownership investments and return less as a result. A bond issued by a company will pay a set amount over a certain period, while during the same time period the stock of a company can double or triple in value, paying for more than a bond—or it can lose heavily and go bankrupt, in which case bond holders usually still get their money and the stockholder often gets nothing [6].

2.3.1 BONDS

A bond is a debt investment in which an investor loans money to an entity (typically corporate or governmental), which borrows the funds for a defined period of time at a variable or fixed interest rate. Bonds are used by companies, municipalities, states and sovereign governments to raise money and finance a variety of projects and activities. Owners of bonds are debt holders, or creditors, of the issuer. The risks and returns vary widely between the different types of bonds, but overall, lending investments pose a lower risk and provide a lower return than ownership investments [7].

2.3.2 CDs

A CD, or certificate of deposit, is a savings certificate entitling the bearer to receive interest. A CD bears a maturity date, a specified fixed interest rate and can be issued in any denomination. CDs are generally issued by commercial banks and are insured by the FDIC. The term of a CD generally ranges from one month to five years [7].

2.3.3 TIPS

TIPS are treasury-inflation protected securities, and are indexed to inflation in order to protect investors from the negative effects of inflation. TIPS are considered an extremely low-risk investment since they are backed by the U.S. government and since their par value rises with inflation, as measured by the Consumer Price Index, while their interest rate remains fixed. Interest on TIPS is paid semiannually. TIPS can be purchased directly from the government through the Treasury Direct system in \$100 increments with a minimum investment of \$100 and are available with 5-, 10-, and 30-year maturities [7].

2.4 CASH EQUIVALENTS

Cash equivalents are investment securities that are short-term, have high credit quality and are highly liquid. Also, cash equivalents are referred to as “cash and equivalents” [6].

Cash equivalents are one of the three main asset classes, along with stocks and bonds. These securities have a low-risk, low-return profile. Cash equivalents include U.S. government Treasury bills, bank certificates of deposit, bankers’ acceptances, corporate commercial paper and other money market instruments.

2.5 ALTERNATIVES

In terms of asset class, alternatives are everything else than stocks, bonds or cash [6].

2.5.1 REITs

Individuals can invest in REITs either by purchasing their shares directly on an open exchange or by investing in a mutual fund that specializes in public real estate. An additional benefit to investing in REITs is the fact that many are accompanied by dividend reinvestment plans (DRIPs). Among other things, REITs invest in shopping malls, office buildings, apartments, warehouses and hotels. Some REITs will invest specifically in one area of real estate—shopping malls, for example - or in one specific region, state or country. Investing in REITs is a liquid, dividend-paying means of participating in the real estate market [7].

2.5.2 VENTURE CAPITAL

Venture capital is money provided by investors to startup firms and small businesses with perceived long-term growth potential. This is a very important source of funding for startups that do not have access to capital markets. It typically entails high risk for the investor, but it has the potential for above-average returns [7].

2.5.3 COMMODITIES

Investing in a commodity is investing in some sort of resource that affects the economy. Oil, beef and coffee beans are all different types of commodities. The contracts investors can use to buy these goods are called Futures Contracts [7].

2.5.4 PRECIOUS METALS

Investing in precious metals can be done either by purchasing the physical asset, or by purchasing futures contracts for the particular metal. Another way to gain investment exposure to precious metals is to purchase shares in publicly traded companies that deal in the exploration or production of precious metals, such as a gold mining company [7].

2.6 FUNDS

Investment fund is a supply of capital belonging to numerous investors that is used to collectively purchase securities while each investor retains ownership and control of his or her own shares. An investment fund provides a broader selection of investment opportunities, greater management expertise and lower investment fees than investors might be able to obtain on their own. Types of investment funds include mutual funds, exchange traded funds, money market funds and hedge funds [6].

2.6.1 MUTUAL FUNDS

An investment vehicle that is made up of a pool of funds collected from many investors for the purpose of investing in securities such as stocks, bonds, money market instruments and similar assets. Mutual funds are operated by money managers, who invest the fund's capital and attempt to produce capital gains and income for the fund's investors. A mutual fund's portfolio is structured and maintained to match the investment objectives stated in its prospectus [7].

2.6.2 INDEX FUNDS

Index fund is a type of mutual fund with a portfolio constructed to match or track the components of a market index, such as the Standard & Poor's 500 Index (S&P 500). An index mutual fund is said to provide broad market exposure, low operating expenses and low portfolio turnover [7].

2.6.3 EXCHANGE TRADED FUNDS (ETFs)

An ETF, or exchange-traded fund, is a marketable security that tracks an index, a commodity, bonds, or a basket of assets like an index fund. Unlike mutual funds, an ETF trades like a common stock on a stock exchange. ETFs experience price changes throughout the day as they are bought and sold. ETFs typically have higher daily liquidity and lower fees than mutual fund shares, making them an attractive alternative for individual investors. Since it trades like a stock, an ETF does not have its net asset value (NAV) calculated once at the end of every day like a mutual fund does [7].

2.6.4 HEDGE FUND

Hedge funds are alternative investments using pooled funds that may use a number of different strategies in order to earn active return, or alpha, for their investors. Hedge funds may be aggressively managed or make use of derivatives and leverage in both domestic and international markets with the goal of generating high returns (either in an absolute sense or over a specified market benchmark). Because hedge funds may have low correlations with a traditional portfolio of stocks and bonds, allocating an exposure to hedge funds can be a good diversifier [7].

3. Factors Impacting Stock Prices

3.1 INTRODUCTION

Stock prices are determined in the marketplace, where seller supply meets buyer demand. But unfortunately, there is no clean equation that tells us exactly how a stock price will behave. That said, we do know a few things about the forces that move a stock up or down. These forces fall into three categories: fundamental factors, technical factors and market sentiment.

3.2 FUNDAMENTAL FACTORS

In an efficient market, stock prices would be determined primarily by fundamentals, which, at the basic level, refer to a combination of two things: 1) an earning base (earnings per share (EPS)) and 2) a valuation multiple (a P/E ratio).

There are several key fundamental factors discussed by David Harper in his article, *Forces That Move Stock Prices*. First is the level of the earnings base (represented by measures such as EPS, cash flow per share, dividends per share). Second is the expected growth in the earnings base. Third is the discount rate, which is itself a function of inflation. The last fundamental factor is the perceived risk of the stock [8].

3.3 TECHNICAL FACTORS

Technical factors are the mix of external conditions that alter the supply of and demand for a company's stock. Some of these indirectly affect fundamentals. (For example, economic growth indirectly contributes to earnings growth.) Technical factors include the following:

3.3.1 INFLATION

Inflation is an input into the valuation multiple, but inflation is also a huge driver from a technical perspective. Historically, low inflation has had a strong inverse correlation with valuations (low inflation drives high multiples and high inflation drives low multiples). Deflation,

on the other hand, is generally bad for stocks because it signifies a loss in pricing power of companies.

3.3.2 ECONOMIC STRENGTH OF MARKET AND PEERS

Company stocks tend to track with the market and with their sector or industry peers. Some prominent investment firms argue that the combination of overall market and sector movements - as opposed to a company's individual performance - determines a majority of a stock's movement. For example, a suddenly negative outlook for one retail stock often hurts other retail stocks as "guilt by association" drags down demand for the whole sector.

3.3.3 SUBSTITUTES

Companies compete for investment dollars with other asset classes on a global stage. These include corporate bonds, government bonds, commodities, real estate and foreign equities. The relation between demand for U.S. equities and their substitutes is hard to figure, but it plays an important role.

3.3.4 INCIDENTAL TRANSACTIONS

Incidental transactions are purchases or sales of a stock that are motivated by something other than belief in the intrinsic value of the stock. These transactions include executive insider transactions, which are often prescheduled or driven by portfolio objectives. Another example is an institution buying or shorting a stock to hedge some other investment. Although these transactions may not represent official "votes cast" for or against the stock, they do impact supply and demand and therefore can move the price.

3.3.5 DEMOGRAPHICS

Some important research has been done about the demographics of investors. Much of it concerns these two dynamics: 1) middle-aged investors, who are peak earners that tend to invest

in the stock market, and 2) older investors who tend to pull out of the market in order to meet the demands of retirement. The hypothesis is that the greater the proportion of middle-aged investors among the investing population, the greater the demand for equities and the higher the valuation multiples.

3.3.6 TRENDS

Often a stock simply moves according to a short-term trend. On the one hand, a stock that is moving up can gather momentum, as "success breeds success" and popularity buoys the stock higher. On the other hand, a stock sometimes behaves the opposite way in a trend and does what is called reverting to the mean. Unfortunately, because trends cut both ways and are more obvious in hindsight, knowing that stocks are "trendy" does not help us predict the future.

3.3.7 LIQUIDITY

Liquidity is an important and sometimes under-appreciated factor. It refers to how much investor interest and attention a specific stock has. Wal-Mart's stock is highly liquid and therefore highly responsive to material news; the average small-cap company is less so. Trading volume is not only a proxy for liquidity, but it is also a function of corporate communications (that is, the degree to which the company is getting attention from the investor community). Large-cap stocks have high liquidity: they are well followed and heavily transacted. Many small-cap stocks suffer from an almost permanent "liquidity discount" because they simply are not on investors' radar screens.

3.4 MARKET SENTIMENT

Market sentiment refers to the psychology of market participants, individually and collectively. Market sentiment is often subjective, biased and obstinate. For example, you can make a solid judgment about a stock's future growth prospects, and the future may even confirm

your projections, but in the meantime the market may myopically dwell on a single piece of news that keeps the stock artificially high or low. And you can sometimes wait a long time in the hope that other investors will notice the fundamentals.

Market sentiment is being explored by the relatively new field of behavioral finance. It starts with the assumption that markets are apparently not efficient much of the time, and this inefficiency can be explained by psychology and other social sciences. The idea of applying social science to finance was fully legitimized when Daniel Kahneman, a psychologist, won the 2002 Nobel Memorial Prize in Economics. Many of the ideas in behavioral finance confirm observable suspicions: that investors tend to overemphasize data that come easily to mind; that many investors react with greater pain to losses than with pleasure to equivalent gains; and that investors tend to persist in a mistake.

Some investors claim to be able to capitalize on the theory of behavioral finance. For the majority, however, the field is new enough to serve as the "catch-all" category, where everything we cannot explain is deposited [8].

4. Trading Strategies

4.1 Introduction

Active trading is the act of buying and selling securities based on short-term movements to profit from the price movements on a short-term stock chart. The mentality associated with an active trading strategy differs from the long-term, buy-and-hold strategy. The buy-and-hold strategy employs a mentality that suggests that price movements over the long term will outweigh the price movements in the short term and, as such, short-term movements should be ignored. Active traders, on the other hand, believe that short-term movements and capturing the market trend are where the profits are made. There are various methods used to accomplish an active-trading strategy, each with appropriate market environments and risks inherent in the strategy. I will discuss four of the most common types of active trading and the built-in cost of each strategy as following.

4.2 Day Trading

Day trading is perhaps the most well know active-trading style. It's often considered a pseudonym for active trading itself. Day trading, as its name implies, is the method of buying and selling securities within the same day. Positions are closed out within the same day they are taken, and no position is held overnight. Traditionally, day trading is done by professional traders, such as specialists or market makers. However, electronic trading has opened up this practice to novice traders [7].

4.3 Position Trading

Some actually consider position trading to be a buy-and-hold strategy and not active trading. However, position trading, when done by an advanced trader, can be a form of active trading. Position trading uses longer term charts—anywhere from daily to monthly—in combination with

other methods to determine the trend of the current market direction. This type of trade may last for several days to several weeks and sometimes longer, depending on the trend. Trend traders look for successive higher highs or lower highs to determine the trend of a security. By jumping on and riding the “wave,” trend traders aim to benefit from both the up and downside of market movements. Trend traders look to determine the direction of market, but they do not try to forecast any price levels. Typically, trend traders jump on the trend after it has established itself, and when the trend breaks, they usually exit the position. This means that in periods of high market volatility, trend trading is more difficult and its positions are generally reduced [7].

4.4 Swing Trading

When a trend breaks, swing traders typically get in the game. At the end of a trend, there is usually some price volatility as the new trend tries to establish itself. Swing traders buy or sell as that price volatility sets in. swing trades are usually held for more than a day but for a shorter time than trend trades. Swing traders often create a set of trading rules based on technical or fundamental analysis; these trading rules or algorithms are designed to identify when to buy and sell a security. While a swing-trading algorithm does not have to be exact and predict the peak or valley of a price move, it does need a market that moves in one direction or another. A range-bound or sideways market is a risk for swing traders [7].

4.5 Scalping

Scalping is one of the quickest strategies employed by active traders. It includes exploiting various price gaps caused by bid/ask spreads and order flows. The strategy generally works by making the spread or buying at the bid price and selling at the ask price to receive the difference between the two price points. Scalpers attempt to hold their positions for a short period, thus decreasing the risk associated with the strategy. Additionally, a scalper does not try to exploit large

moves or move high volumes; rather, they try to take advantage of small moves that occur frequently and move smaller volumes more often. Since the level of profits per trade is small, scalpers look for more liquid markets to increase the frequency of their trades. And unlike swing traders, scalpers like quiet markets that aren't prone to sudden price movements so they can potentially make the spread repeatedly on the same bid/ask prices [7].

4.6 Drawbacks of Active Trading Strategies

The active trading strategies were once only employed by professional traders, and there is a reason for that. Not only does having an in-house brokerage house reduce the costs associated with high frequency trading, but it also ensures a better trade execution. Lower commissions and better execution are two elements that improve the profit potential of the strategies. Significant hardware and software purchases are required to successfully implement these strategies in addition to real-time market data. These costs make successfully implementing and profiting from active trading somewhat prohibitive for the individual trader, although not all together unachievable.

4.7 Selection of Trading Strategies

In order to compare the effectiveness of different strategies, I choose two distinct trading strategies to run the simulations on same companies' stocks, which are Day Trading and Swing Trading.

5. Company Profiles

5.1 EMC CORPORATION (EMC)

5.1.1 COMPANY PROFILE

EMC Corporation develops, delivers, and supports information infrastructure and virtual infrastructure technologies, solutions, and services. It offers enterprise storage systems and software deployed in storage area networks (SAN), networked attached storage (NAS), unified storage combining NAS and SAN, object storage, and/or direct attached storage environments, as well as provides a portfolio of backup products that support a range of enterprise application workloads [9].

5.1.2 KEY STATISTICS AND STOCK MARKET PERFORMANCE

EMC has a market capital: \$51.50 Billion. Figure 5.1.1 gives the company portfolio summary and Figure 5.1.2 provides its recent stock trend. According to both figures, the EMC stock performs well in the stock market, and it might potentially grow in the future based on the historical trend. Also, the stock price is acceptable for most people who are investing their own money in the stock market.

EMC Corporation (EMC) - NYSE ★ Watchlist

26.52 ↓0.17 (0.64%) May 28, 4:00PM EDT

After Hours : **26.52** ↑0.00 (0.01%) May 28, 4:43PM EDT

Prev Close:	26.69	Day's Range:	26.47 - 26.65
Open:	26.58	52wk Range:	25.07 - 30.92
Bid:	26.41 x 300	Volume:	8,707,640
Ask:	26.69 x 300	Avg Vol (3m):	15,995,800
1y Target Est:	30.45	Market Cap:	51.50B
Beta:	1.47	P/E (ttm):	21.06
Earnings Date:	Jul 21 - Jul 27 (Est.)	EPS (ttm):	1.26
		Div & Yield:	0.46 (1.70%)

Quotes delayed. Some values indicated otherwise. Currency is USD

Figure 5.1.1 EMC CORP. Portfolio Summary



Figure 5.1.2 EMC CORP. Stock Trend in 5 Days

5.1.3 ANALYST OPINION

There are some recommendations suggested by stock analysts, and it could be helpful for running simulations because the analysts help me to understand the market as well as the stock trend. Even though the data and recommendations are based on current market trend, it will still provide useful insights for trading stocks.

Figure 5.1.3 and Figure 5.1.4 show both short-term and long-term analyst opinion towards EMC's stock, the investors should buy the stocks, but it is not the best time to buy it. However, the stock might make profit in the future.

Recommendation Summary*	
Mean Recommendation (this week):	2.0
Mean Recommendation (last week):	2.0
Change:	0.0

Figure 5.1.3 EMC CORP. Recommendation Summary

*(Strong Buy) 1.0 – 5.0 (Sell)

Recommendation Trends				
	Current Month	Last Month	Two Months Ago	Three Months Ago
Strong Buy	11	11	10	11
Buy	16	16	18	18
Hold	11	10	10	9
Underperform	0	0	0	0
Sell	0	0	0	0

Figure 5.1.4 EMC CORP. Recommendation Trends

5.2 AMDOCS LIMITED (DOX)

5.2.1 COMPANY PROFILE

Amdocs Limited provides software and services for communications, media, and entertainment industry service providers worldwide. It offers revenue management products that address BSS/OSS data processing and event-handling needs, as well as provides automated partner management and settlement for various types of partners, including interconnect, content, roaming, digital advertising, mobile virtual network operator, wholesale, and dealer [9].

5.2.2 KEY STATISTICS AND STOCK MARKET PERFORMANCE

Amdocs Limited has market capital: \$8.49 Billion. Figure 5.2.1 gives the company portfolio summary, and Figure 5.2.5 provides its recent stock trend. Based on the two figures, the Amdocs' stocks had a drop on Tuesday, but it went up slowly on Wednesday, and it goes back to the same level as last Thursday by this Thursday. Therefore, it might potentially grow in the future based on the historical trend from last week, which will create profit from buying the stocks.

Amdocs Limited (DOX) - NasdaqGS ★ Watchlist

54.66 ↑0.74(1.37%) May 28, 4:00PM EDT

After Hours : **54.33** ↓0.33 (0.61%) May 28, 4:11PM EDT

Prev Close:	53.92	Day's Range:	53.79 - 54.68
Open:	54.08	52wk Range:	44.06 - 55.85
Bid:	N/A	Volume:	675,386
Ask:	56.00 x 800	Avg Vol (3m):	674,506
1y Target Est:	58.60	Market Cap:	8.49B
Beta:	0.73	P/E (ttm):	18.99
Earnings Date:	Jul 27 - Jul 31 (Est.)	EPS (ttm):	2.88
		Div & Yield:	0.68 (1.30%)

Figure 5.2.1 Amdocs Limited Portfolio Summary



Figure 5.2.2 Amdocs Limited Stock Trend in 5 Days

5.2.3 ANALYST OPINION

Figure 5.2.3 and Figure 5.2.4 provide short-term and long-term analyst opinion on Amdocs' stocks. According to these opinions, investors could invest on its stocks to make profits. However, it is not strongly suggested to buy the stocks, so if the investors are tied on money, they should do more analysis on the historical trend and current news.

Recommendation Summary*	
Mean Recommendation (this week):	2.2
Mean Recommendation (last week):	2.2
Change:	0.0

Figure 5.2.3 Amdocs Limited Recommendation Summary

*(Strong Buy) 1.0 – 5.0 (Sell)

Recommendation Trends				
	Current Month	Last Month	Two Months Ago	Three Months Ago
Strong Buy	3	3	3	3
Buy	3	3	3	3
Hold	5	5	5	5
Underperform	0	0	0	0
Sell	0	0	0	0

Figure 5.2.4 Amdocs Limited Recommendation Trends

5.3 VERIZON COMMUNICATIONS INC. (VZ)

5.3.1 COMPANY PROFILE

Verizon Communications Inc., through its subsidiaries, provides communications, information, and entertainment products and services to consumers, businesses, and governmental agencies worldwide. The company's Wireless segment offers wireless voice and data services; messaging services; service that enables its customers to access the Internet on smartphones, basic phones, notebook computers, and tablets; customers and business-focused multimedia offerings; location-based services; global data services; LTE Internet, a high-speed Internet service; and network access and value added services to support telemetry-type applications [9].

5.3.2 KEY STATISTICS AND STOCK MARKET PERFORMANCE

Verizon Communications Inc. has market capital: \$202.05 Billion. Figure 5.3.1 shows the company's portfolio, and Figure 5.3.2 provides its recent stock market performance. According to the two figures, the stock is fluctuating over the week, and the ups and downs are not following regular patterns. Even though, the stock price is growing positively overall, there are uncertainties for the future stock price.

Verizon Communications Inc. (VZ) - NYSE ★ Watchlist

49.54 ↓0.03 (0.06%) May 28, 4:00PM EDT

After Hours : **49.62** ↑0.08 (0.16%) May 28, 6:12PM EDT

Prev Close:	49.57	Day's Range:	49.38 - 49.65
Open:	49.47	52wk Range:	45.09 - 53.66
Bid:	49.55 x 29800	Volume:	8,432,832
Ask:	49.56 x 4600	Avg Vol (3m):	14,764,800
1y Target Est:	51.78	Market Cap:	202.05B
Beta:	0.41	P/E (ttm):	20.80
Next Earnings Date:	21-Jul-15 📅	EPS (ttm):	2.38
		Div & Yield:	2.20 (4.40%)

Figure 5.3.1 Verizon Communications Inc. Portfolio Summary



Figure 5.3.2 Verizon Communications Inc. Stock Trend in 5 Days

5.3.3 ANALYST OPINION

Figure 5.3.3 and Figure 5.3.4 provide both short-term and long-term analyst opinion. Even though the mean of recommendation for buying/selling the stock is about 2.3, which is to buy the stock, most analysts still suggest holding the stock since three months ago. Therefore, when Day

Trading strategy applied in the simulation for this stock, it might result in losing money due to the stock price fluctuates over time.

Recommendation Summary*	
Mean Recommendation (this week):	2.3
Mean Recommendation (last week):	2.3
Change:	0.0

Figure 5.3.3 Verizon Communication Inc. Recommendation Summary

*(Strong Buy) 1.0 – 5.0 (Sell)

Recommendation Trends				
	Current Month	Last Month	Two Months Ago	Three Months Ago
Strong Buy	9	9	9	9
Buy	7	9	9	9
Hold	14	13	14	14
Underperform	1	1	1	1
Sell	0	0	0	0

Figure 5.3.4 Verizon Communication Inc. Recommendation Trends

5.4 ORACLE CORPORATION (ORCL)

5.4.1 COMPANY PROFILE

Oracle Corporation develops, manufactures, markets, hosts, and supports database and middleware software, application software, cloud infrastructure, hardware systems, and related services worldwide. It provides software and hardware systems, and related services to manage their cloud-based or on-premise IT environments, as well as to deploy cloud software-as-a-service, platform-as-a-service, and infrastructure-as-a-service. The company offers software for mobile computing; database and middleware software that runs and manages business applications for midsize businesses and large enterprises; and Java, a software development language [9].

5.4.2 KEY STATISTICS AND STOCK MARKET PERFORMANCE

Oracle Corporation has market capital: \$191.54 Billion. Figure 5.4.1 gives the company's portfolio and Figure 5.4.2 provides its recent stock price trend. Based on both figures, the Oracle's stock went down twice in one week. The stock price is going back up slowly on Thursday, but it also fluctuates as well. Therefore, the investors might need to analyze and research before they invest on Oracle's stocks at this time period.

Oracle Corporation (ORCL) - NYSE ★ Watchlist

43.86 ↓ 0.28 (0.63%) May 28, 4:03PM EDT

After Hours : **43.95** ↑ 0.09 (0.21%) May 28, 6:40PM EDT

Prev Close:	44.14	Day's Range:	43.64 - 44.25
Open:	44.08	52wk Range:	35.82 - 46.71
Bid:	43.86 x 200	Volume:	7,273,163
Ask:	43.95 x 400	Avg Vol (3m):	12,824,200
1y Target Est:	46.34	Market Cap:	191.54B
Beta:	1.25	P/E (ttm):	18.32
Earnings Date:	Jun 17 - Jun 24 (Est.)	EPS (ttm):	2.39
		Div & Yield:	0.60 (1.40%)

Figure 5.4.1 Oracle CORP. Portfolio Summary



Figure 5.4.2 Oracle CORP. Stock Trend in 5 Days

5.4.3 ANALYST OPINION

Figure 5.4.3 and Figure 5.4.4 show the short-term and long-term analyst opinion towards selling/buying Oracle's stocks, investors should hold the stock because the stock might not make profits in this time period. Therefore, Day Trading strategy might result in losing money, but Swing Trading strategy might result in making profit as the trend breaks.

Recommendation Summary*	
Mean Recommendation (this week):	2.4
Mean Recommendation (last week):	2.4
Change:	0.0

Figure 5.4.3 Oracle CORP. Recommendation Summary

*(Strong Buy) 1.0 – 5.0 (Sell)

Recommendation Trends				
	Current Month	Last Month	Two Months Ago	Three Months Ago
Strong Buy	7	7	7	7
Buy	14	14	13	13
Hold	15	15	15	15
Underperform	3	3	3	3
Sell	0	0	0	0

Figure 5.4.4 Oracle CORP. Recommendation Trends

5.5 CGI GROUP, INC. (GIB)

5.5.1 COMPANY PROFILE

CGI Group Inc., together with its subsidiaries, provides information technology (IT) and business process services. It offers a range of IT and management consulting services, including business transformation, IT strategic planning, business process engineering, and systems architecture; and integrates and customizes technologies and software applications to create IT systems that respond to clients strategic needs [9].

5.5.2 KEY STATISTICS AND STOCK MARKET PERFORMANCE

CGI Group, Inc. has market capital: \$13.26 Billion. Figure 5.5.1 shows the portfolio and Figure 5.5.2 provides its stock market performance. From both Figure 5.5.1 and Figure 5.5.2, the stock price is dropping over couple days, and it seems that it will continue going down in the future. So it will be a good time for new investors to come in, which they can buy the stocks at a relatively low price.

CGI Group, Inc. (GIB) - NYSE ★ Watchlist

42.32 ↓0.02 (0.05%) May 28, 4:02PM EDT

Prev Close:	42.34	Day's Range:	42.02 - 42.51
Open:	42.14	52wk Range:	32.24 - 46.30
Bid:	38.75 x 100	Volume:	110,064
Ask:	45.50 x 100	Avg Vol (3m):	306,113
1y Target Est:	55.22	Market Cap:	13.26B
Beta:	0.98	P/E (ttm):	17.71
Next Earnings Date:	N/A	EPS (ttm):	2.39
		Div & Yield:	N/A (N/A)

Figure 5.5.1 CGI Group, Inc. Portfolio Summary



Figure 5.5.2 CGI Group, Inc. Stock Trend in 5 Days

5.5.3 ANALYST OPINION

Figure 5.5.3 and Figure 5.5.4 provide either short-term and long-term analyst opinion regarding buying or selling stocks. Even though the stock price of CGI Group, Inc. is going down over the week, there are analysts recommend to buy the stock because it might be a good timing for new stockholders to buy the stocks at a low price. However, the trend is hard to predict, so both Day Trading and Swing Trading strategy might have similar results because the trend is swing low for now.

Recommendation Summary*	
Mean Recommendation (this week):	2.3
Mean Recommendation (last week):	2.3
Change:	0.0

Figure 5.5.3 CGI Group, Inc. Recommendation Summary

*(Strong Buy) 1.0 – 5.0 (Sell)

Recommendation Trends				
	Current Month	Last Month	Two Months Ago	Three Months Ago
Strong Buy	2	2	2	2
Buy	6	6	7	8
Hold	4	4	4	4
Underperform	1	1	1	1
Sell	0	0	0	0

Figure 5.5.4 CGI Group, Inc. Recommendation Trends

5.6 COGNIZANT TECHNOLOGY SOLUTIONS CORPORATION (CTSH)

5.6.1 COMPANY PROFILE

Cognizant Technology Solutions Corporation provides information technology (IT), consulting, and business process services worldwide. The company operates through four segments: Financial Services, Healthcare, Manufacturing/Retail/Logistics, and Other. Its consulting and technology services include IT strategy consulting, program management consulting, operations improvement consulting, strategy consulting, and business consulting services; and application design and development, systems integration, enterprise resource planning, and customer relationship management implementation services [9].

5.6.2 KEY STATISTICS AND STOCK MARKET PERFORMANCE

Cognizant Technology Solutions Corporation has market capital: \$39.59 Billion. Figure 5.6.1 gives the company portfolio and Figure 5.6.2 provides its recent stock trend. According to the two graphs, the stock price went down and goes back up over this week. Since it is still growing since Wednesday, it could be good choice for investors to make profits by buying this stock. However, the price of the stock is relatively high for most ordinary traders who do not have lots of money for investment.

Cognizant Technology Solutions Corporation (CTSH) - NasdaqGS ★

64.84 ↑0.16 (0.25%) May 28, 4:00PM EDT

After Hours : **64.67** ↓0.17 (0.26%) May 28, 5:33PM EDT

Prev Close:	64.68	Day's Range:	64.14 - 64.93
Open:	64.51	52wk Range:	41.51 - 65.58
Bid:	63.61 x 100	Volume:	1,898,932
Ask:	N/A	Avg Vol (3m):	3,346,820
1y Target Est:	72.79	Market Cap:	39.59B
Beta:	1.71	P/E (ttm):	27.02
Earnings Date:	Aug 4 - Aug 10 (Est.)	EPS (ttm):	2.40
		Div & Yield:	N/A (N/A)

Figure 5.6.1 Cognizant Tech Solutions Portfolio Summary



Figure 5.6.2 Cognizant Tech Solutions Stock Trend in 5 Days

5.6.3 ANALYST OPINION

Figure 5.6.3 and Figure 5.6.4 provide both short-term and long-term analyst opinion. According to the analyst opinion on Cognizant Technology Solutions, professional investors

should buy the stock because it keeps growing positively, and the historical performance is better than other companies' stocks performance in the stock market.

Recommendation Summary*	
Mean Recommendation (this week):	1.7
Mean Recommendation (last week):	1.7
Change:	0.0

Figure 5.6.3 Cognizant Tech Solutions Recommendation Summary

*(Strong Buy) 1.0 – 5.0 (Sell)

Recommendation Trends				
	Current Month	Last Month	Two Months Ago	Three Months Ago
Strong Buy	11	11	11	10
Buy	17	17	17	16
Hold	2	2	2	3
Underperform	0	0	0	0
Sell	0	0	0	0

Figure 5.6.4 Cognizant Tech Solutions Recommendation Trends

5.7 SYMANTEC CORPORATION (SYMC)

5.7.1 COMPANY PROFILE

Symantec Corporation, together with its subsidiaries, provides security, backup, and availability solutions worldwide. Its products and services protect people and information in any environment from mobile devices and enterprise data centers to cloud-based systems. The company operates in three segments: User Productivity & Protection; Information Security; and Information Management [9].

5.7.2 KEY STATISTICS AND STOCK MARKET PERFORMANCE

Symantec Corporation has market capital: \$16.93 Billion. Figure 5.7.1 shows the company portfolio summary and Figure 5.7.2 provides its recent stock trend. Based on Figure 5.7.1 and

Figure 5.7.2, the Symantec's stock had a huge drop on Tuesday, but it went up over the two days. Therefore, it might potentially grow in the future based on the historical trend from last week.

Symantec Corporation (SYMC) - NasdaqGS

24.81 ↑0.07(0.28%) May 28, 4:00PM EDT

After Hours : **24.73** ↓0.08 (0.32%) May 28, 4:43PM EDT

Prev Close:	24.74	Day's Range:	24.61 - 24.84
Open:	24.67	52wk Range:	21.07 - 27.32
Bid:	24.44 x 400	Volume:	1,619,691
Ask:	26.00 x 500	Avg Vol (3m):	4,404,100
1y Target Est:	25.59	Market Cap:	16.93B
Beta:	1.22	P/E (ttm):	18.65
Earnings Date:	Aug 4 - Aug 10 (Est.)	EPS (ttm):	1.33
		Div & Yield:	0.60 (2.40%)

Figure 5.7.1 Symantec CORP. Portfolio Summary



Figure 5.7.2 Symantec CORP. Stock Trend in 5 Days

5.7.3 ANALYST OPINION

Figure 5.7.3 and Figure 5.7.4 provide both short-term and long-term analyst opinion. From the analyst opinion, it suggests that I should hold the stock, and wait to see what will happen in the market. Even though the Symantec's stocks are performing well in the stock market, there will not be profit for investors to sell at this time.

Recommendation Summary*	
Mean Recommendation (this week):	2.8
Mean Recommendation (last week):	2.8
Change:	0.0

Figure 5.7.3 Symantec CORP. Recommendation Summary

*(Strong Buy) 1.0 – 5.0 (Sell)

Recommendation Trends				
	Current Month	Last Month	Two Months Ago	Three Months Ago
Strong Buy	2	2	2	2
Buy	4	4	4	4
Hold	21	20	20	20
Underperform	2	2	2	2
Sell	0	1	1	1

Figure 5.7.4 Symantec CORP. Recommendation Trends

6. Company Stock Performances

6.1 SIMULATION WEEK #1

Since the Day Trading and Swing Trading methods are used for simulations, the weekly stock performance, including five days per week, for each company in the portfolio will be captured as following.

6.1.1 EMC Stock Week #1 Performance

Figure 6.1.1 shows the overall performance of EMC stock, which is growing since the first day of Week #1. However there are some declines in the end of each day, so the peak is around noon and early afternoon time. The stock price is changing by 3.70% overall.

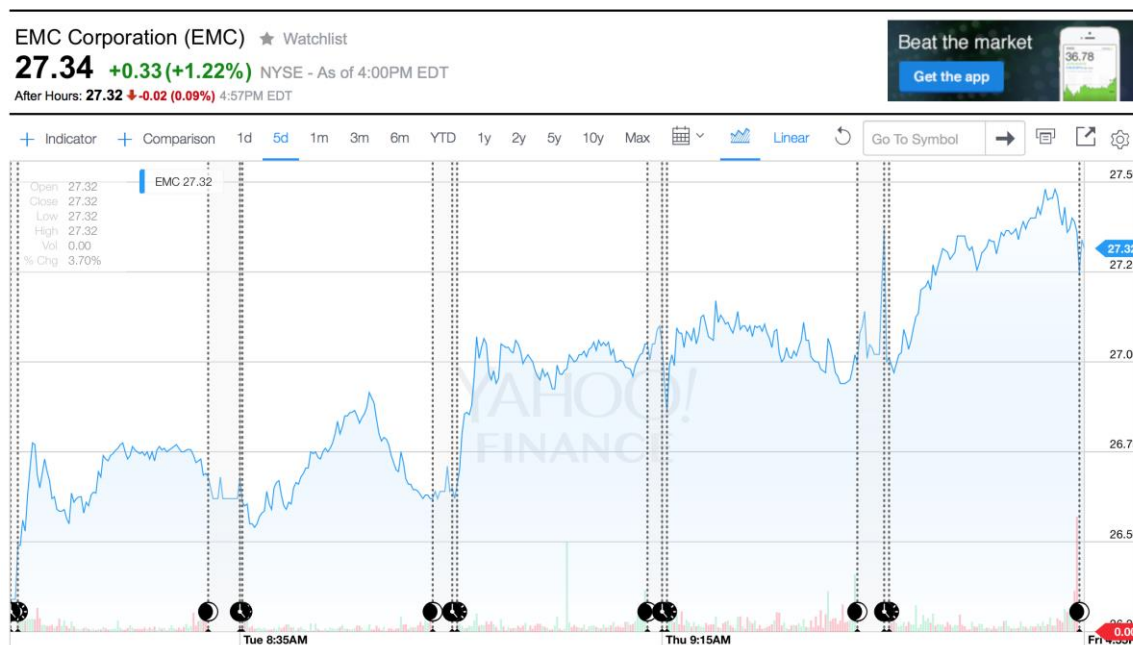


Figure 6.1.1 EMC Corp. Stock June 1st, 2015—June 5th, 2015

6.1.2 DOX Stock Week #1 Performance

Figure 6.1.2 provides the DOX stock performance. DOX stock is growing for the first two days in Week #1, and it reaches the highest price on the third day of Week #1. However, the decrease of stock price is relatively flat, and it fluctuates less than the EMC stock. The stock price is changing by 2.74% overall.



Figure 6.1.2 Amdocs Limited Stock June 1st, 2015—June 5th, 2015

6.1.3 VZ Stock Week #1 Performance

Figure 6.1.3 gives the Week #1 VZ stock performance. The VZ stock price start decreasing since the first day of Week #1, and it reaches the lowest price on the fifth day of Week #1. The stock price declines sharply on the fourth day of Week #1. Even through the stock price increases slightly, the stock price decreases aggressively overall. The stock price is changing by -4.47% overall.



Figure 6.1.3 Verizon Communications Inc. Stock June 1st, 2015—June 5th, 2015

6.1.4 ORCL Stock Week #1 Performance

Figure 6.1.4 shows the ORCL stock performance in Week #1. The ORCL stock fluctuates every day in Week #1, and the stock price always decrease sharply in the morning when the market opens. Especially, on the second day of Week #1, the price drops dramatically, and it reaches the lowest price in Week #1. The stock price is changing by 0.71% overall.



Figure 6.1.4 Verizon Communications Inc. Stock June 1st, 2015—June 5th, 2015

6.1.5 GIB Stock Week #1 Performance

Figure 6.1.5 provides the GIB stock performance in Week #1. The GIB stock fluctuates overall, and it grows in the first three days of Week #1. However, it starts declining since the fourth day of Week #1, and it reaches the lowest price on the fifth day of Week #1. The stock price is changing by 0.20% overall.

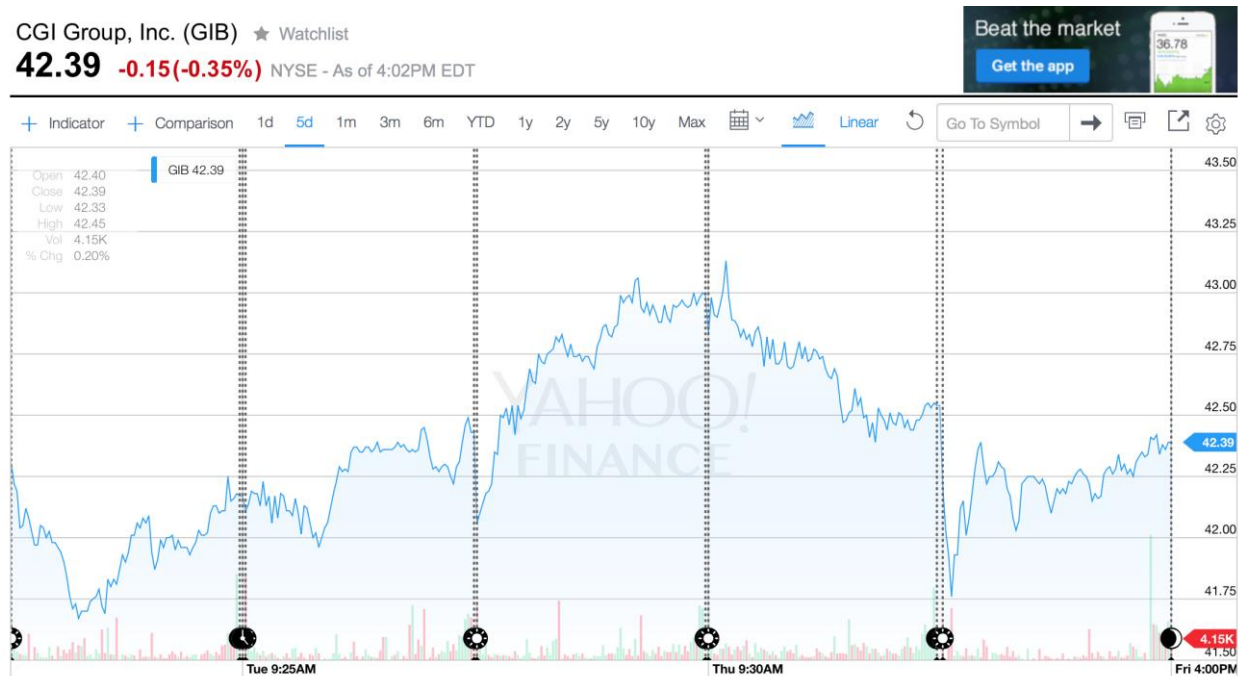


Figure 6.1.5 CGI Group Inc. Stock June 1st, 2015—June 5th, 2015

6.1.6 CTSH Stock Week #1 Performance

Figure 6.1.6 shows the CTSH stock performance in Week #1. The CTSH stock performs positively in the first three days of Week #1, even though there are some fluctuations within the three days. The stock price drops aggressively in the last two days of Week #1. Also, the stock price is changing by -0.34% overall.



Figure 6.1.6 Cognizant Technology Solutions Corp. Stock June 1st, 2015—June 5th, 2015

6.1.7 SYMC Stock Week #1 Performance

Figure 6.1.7 provides the SYMC stock performance in Week #1. The SYMC stock's performance is similar to the VZ's stock performance, which the stock price decreases since the first day of Week #1. There are some increases of stock price in the second and the third day of Week #1, but the stock price is changing by -3.15% overall.

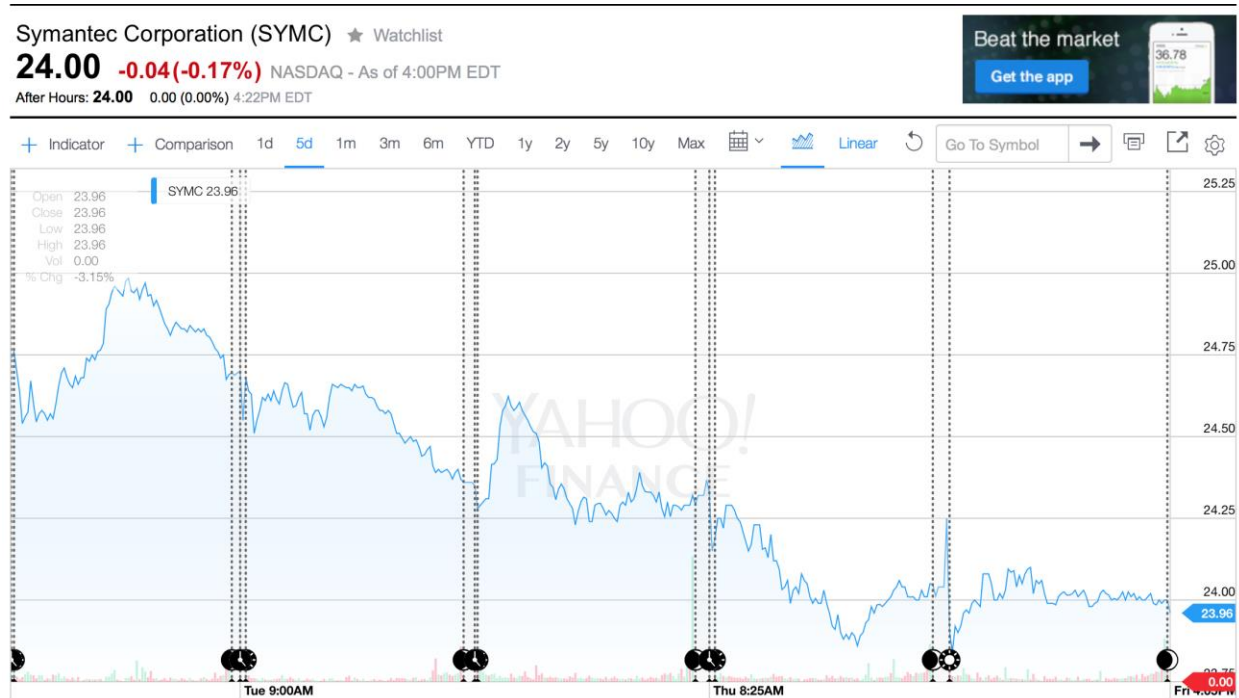


Figure 6.1.7 Symantec Crop. Stock June 1st, 2015—June 5th, 2015

6.1.8 Week #1 Stock Performances Conclusion

The VZ and SYMC stocks have aggressively negative change on the stock prices, which are -4.47% and -3.15%. Also, CTSH stock is changing by -0.34% as well. However, there are four stocks have positive change on stock prices, especially EMC stock price changes by 3.70% and DOX changes by 2.74%. ORCL and GIB stocks have more flat stock price change in Week #1, which are 0.71% and 0.20%.

6.2 SIMULATION WEEK #2

Since the Day Trading and Swing Trading methods are used for simulations, the weekly stock performance, including five days per week, for each company in the portfolio will be captured as following for Week #2.

6.2.1 EMC Stock Week #2 Performance

Figure 6.2.1 shows the overall performance of EMC stock, which is growing since the first day of Week #2. The stock price decreases in the first two days of Week #2, but it starts increases aggressively since the afternoon of Day 2. However, the price declines again in Day 4. The stock price is changing by -0.09% overall.



Figure 6.2.1 EMC Corp. Stock June 8th, 2015—June 12th, 2015

6.2.2 DOX Stock Week #2 Performance

Figure 6.2.2 provides the DOX stock performance. DOX stock is declining for the first two days in Week #2, and it reaches the lowest price on the second day of Week #2. However, the price goes up in the last three days in Week #2, and it fluctuates less than the EMC stock daily. The stock price is changing by -0.38% overall.



Figure 6.2.2 Amdocs Limited Stock June 8th, 2015—June 12th, 2015

6.2.3 VZ Stock Week #2 Performance

Figure 6.2.3 gives the Week #2 VZ stock performance. The VZ stock price fluctuates every day aggressively, and the change of stock price is huge every day. The stock price reaches the lowest point on the third day of Week #2 when the market opens in the morning. The stock price is changing by -0.06% overall.



Figure 6.2.3 Verizon Communications Inc. Stock June 8th, 2015—June 12th, 2015

6.2.4 ORCL Stock Week #2 Performance

Figure 6.2.4 shows the ORCL stock performance in Week #2. The ORCL stock decreases in the first two days in Week #2, and the stock price reaches the lowest point on the second day of Week #2. However, the stock price increases aggressively on the third day of Week #2, and it does not change much in the last two days of Week #2. The stock price is changing by 1.56% overall.



Figure 6.2.4 Verizon Communications Inc. Stock June 8th, 2015—June 12th, 2015

6.2.5 GIB Stock Week #2 Performance

Figure 6.2.5 provides the GIB stock performance in Week #2. The GIB stock fluctuates overall, but there are no big jumps and changes of stock price in Week #2. The change of stock price in last two days of Week #2 is flat, and it increases comparing to the stock price of the first of Week #2. The stock price is changing by 0.90% overall.



Figure 6.2.5 CGI Group Inc. Stock June 8th, 2015—June 12th, 2015

6.2.6 CTSH Stock Week #2 Performance

Figure 6.2.6 shows the CTSH stock performance in Week #2. The CTSH stock performs negatively in the first two days of Week #2, and it reaches the lowest point in the second day of Week #2 when the stock market opens. Even though the stock price increase aggressively in the third day, it still decreases a lot in the last two days of Week #2. Also, the stock price is changing by -1.01% overall.



Figure 6.2.6 Cognizant Technology Solutions Corp. Stock June 8th, 2015—June 12th, 2015

6.2.7 SYMC Stock Week #2 Performance

Figure 6.2.7 provides the SYMC stock performance in Week #2. The SYMC stock's performance is similar to the CTSH's stock performance, which the stock price decreases since the first day of Week #2, and it increases on the third day of Week #2. The stock price drops dramatically on the fifth day of Week #2 when the market opens, and the stock price is changing by -1.04% overall.



Figure 6.2.7 Symantec Crop. Stock June 8th, 2015—June 12th, 2015

6.2.8 Week #2 Stock Performances Conclusion

The CTSH and SYMC stocks have aggressively negative change on the stock prices, which are -1.01% and -1.04%. Also, DOX stock is changing by -0.38%, VZ stock is changing by -0.06%, and EMC stock is changing by -0.09%. However, there are four stocks have positive change on stock prices, especially ORCL stock price changes by 1.56% and GIB changes by 0.90%. The stock price change in Week #2 is relatively flatter comparing to the change in Week #1.

6.3 SIMULATION WEEK #3

Since the Day Trading and Swing Trading methods are used for simulations, the weekly stock performance, including five days per week, for each company in the portfolio will be captured as following for Week #3. The Yahoo Finance could not provide full picture of stock performance in 5 days, so the figures are from CNN Money [10].

6.3.1 EMC Stock Week #3 Performance

Figure 6.3.1 shows the overall performance of EMC stock, which is growing since the first day of Week #3. The stock price decreases in the last days of Week #3, but the overall performance of EMC stock in Week#3 is increasing steadily. The stock price is changing by -0.02% overall in 5 days.



Figure 6.3.1 EMC Corp. Stock June 15th, 2015—June 19th, 2015

6.3.2 DOX Stock Week #3 Performance

Figure 6.3.2 provides the DOX stock performance. DOX stock fluctuate every day in Week #3, but it is increasing overall. Also, the price of DOX stock reaches the highest point in the last day of Week #3, which is different from EMC stock performance. The DOX stock price is changing by -0.34% overall in 5 days.

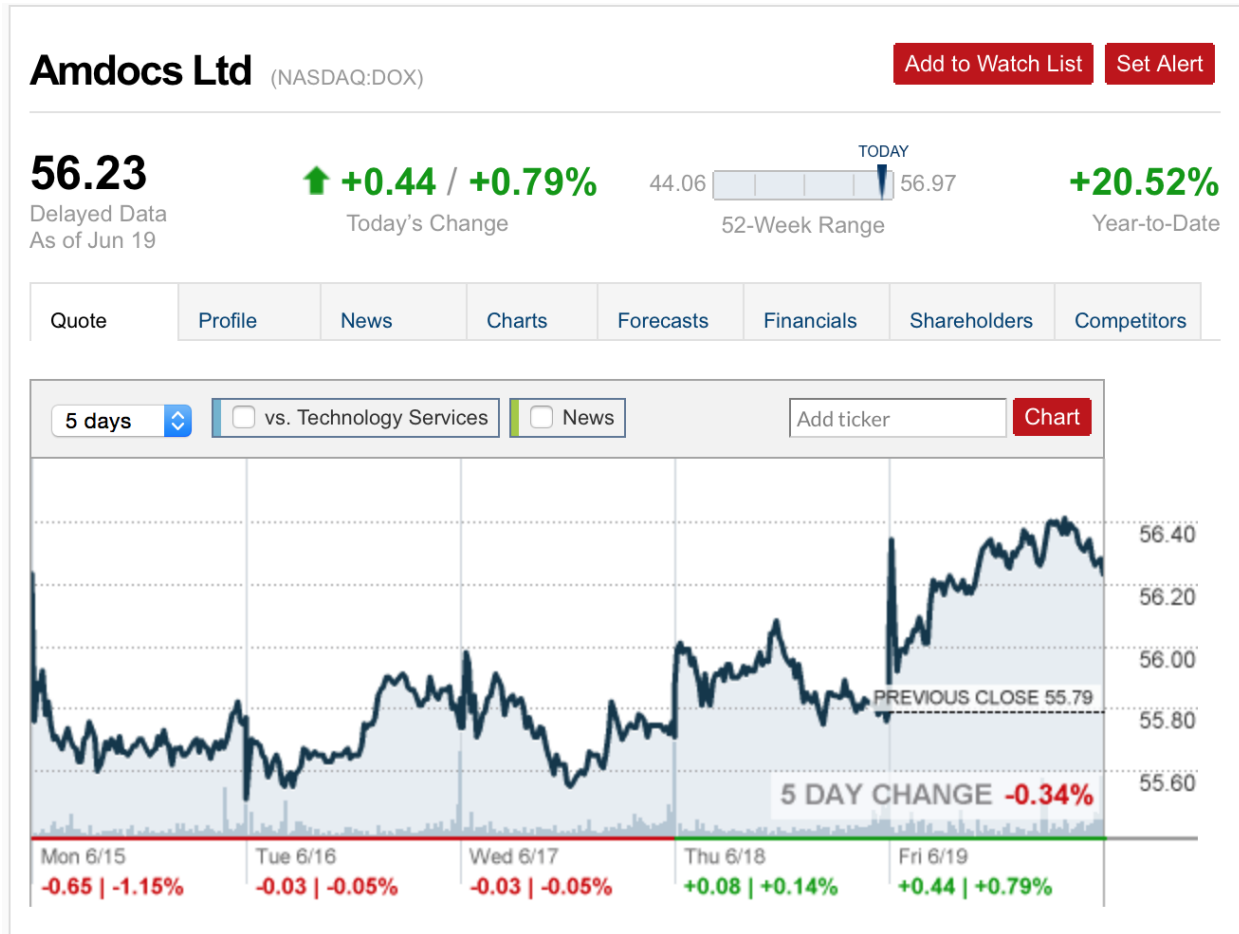


Figure 6.3.2 Amdocs Limited Stock June 15th, 2015—June 19th, 2015

6.3.3 VZ Stock Week #3 Performance

Figure 6.3.3 gives the Week #3 VZ stock performance. The VZ stock price increases in the first two days of Week #3, but it decreases on the third day of Week #3. However, it fluctuates in the last two days of Week #3 as well. The stock price reaches the highest point on the fourth day of Week #3. The stock price is changing by 0.44% overall in 5 days.



Figure 6.3.3 Verizon Communications Inc. Stock June 15th, 2015—June 19th, 2015

6.3.4 ORCL Stock Week #3 Performance

Figure 6.3.4 shows the ORCL stock performance in Week #3. The ORCL stock increases in the first four days in Week #3, and the stock price reaches the highest point by the end of the third day of Week #3. However, the stock price decrease dramatically on the fourth day of Week #3 when the market opens. The stock price is changing by -6.20% overall in 5 days.



Figure 6.3.4 Verizon Communications Inc. Stock June 15th, 2015—June 19th, 2015

6.3.5 GIB Stock Week #3 Performance

Figure 6.3.5 provides the GIB stock performance in Week #3. The GIB stock decreases slowly since the first day of Week #3, and it declines aggressively on the last of Week #3. The stock price is changing by -5.33% overall in 5 days.



Figure 6.3.5 CGI Group Inc. Stock June 15th, 2015—June 19th, 2015

6.3.6 CTSH Stock Week #3 Performance

Figure 6.3.6 shows the CTSH stock performance in Week #3. The CTSH stock performs negatively in the first two days of Week #3, and it only increases on the fourth day of Week #3. Even though the stock price increase aggressively on the fourth day, it still decreases a lot in the last day of Week #3. Also, the stock price is changing by -1.76% overall.

Cognizant Technology Solutions Corp

(NASDAQ:CTSH)

Add to Watch List

Set Alert

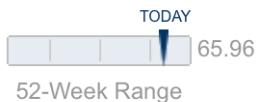
62.49

Delayed Data
As of Jun 19

↓ **-0.76 / -1.20%**

Today's Change

41.51



+18.67%

Year-to-Date

Quote	Profile	News	Charts	Forecasts	Financials	Shareholders	Competitors
-------	---------	------	--------	-----------	------------	--------------	-------------



Figure 6.3.6 Cognizant Technology Solutions Corp. Stock June 15th, 2015—June 19th, 2015

6.3.7 SYMC Stock Week #3 Performance

Figure 6.3.7 provides the SYMC stock performance in Week #3. The SYMC stock's performance is similar to the CTSH's stock performance, which the stock price increases since the second day of Week #3, and it decreases on the last day of Week #3. The stock price drops dramatically on the fifth day of Week #3 when the market opens, and the stock price is changing by 1.35% overall.



Figure 6.3.7 Symantec Crop. Stock June 15th, 2015—June 19th, 2015

6.3.8 Week #3 Stock Performances Conclusion

The ORCL and GIB stocks have aggressively negative change on the stock prices, which are -6.20% and -5.33%. Also, CTSH stock is changing by -1.76%, DOX stock is changing by -

0.34%. However, there are three stocks have positive change on stock prices, especially CTSH stock price changes by 1.35%, VZ changes by 0.44%, and EMC changes by 0.02% The stock price change in Week #3 is relatively more dramatic and negatively aggressive comparing to the change in Week #2.

6.4 SIMULATION WEEK #4

Since the Day Trading and Swing Trading methods are used for simulations, the weekly stock performance, including five days per week, for each company in the portfolio will be captured as following for Week #4.

6.4.1 EMC Stock Week #4 Performance

Figure 6.4.1 shows the overall performance of EMC stock, which does not fluctuate aggressively in the first two days of Week #4. The stock price decreases since the third day of Week #4, and the overall performance of EMC stock in Week#4 is decreasing aggressively, especially on the last day of Week #4. The stock price is changing by -2.12% overall in 5 days.



Figure 6.4.1 EMC Corp. Stock June 22nd, 2015—June 26th, 2015

6.4.2 DOX Stock Week #4 Performance

Figure 6.4.2 provides the DOX stock performance. DOX stock always drops sharply after the market opens every day in Week #4, but it is increasing overall. Also, the price of DOX stock fluctuates dramatically in the last two days of Week #4, which is different from EMC stock performance. The DOX stock price is changing by -1.60% overall in 5 days.



Figure 6.4.2 Amdocs Limited Stock June 22nd, 2015—June 26th, 2015

6.4.3 VZ Stock Week #4 Performance

Figure 6.4.3 gives the Week #4 VZ stock performance. The VZ stock price fluctuates aggressively in Week #4. However, it does not fluctuate a lot in the last day of Week #4. The stock price reaches the highest point on the second day of Week #4. The stock price is changing by -1.04% overall in 5 days.

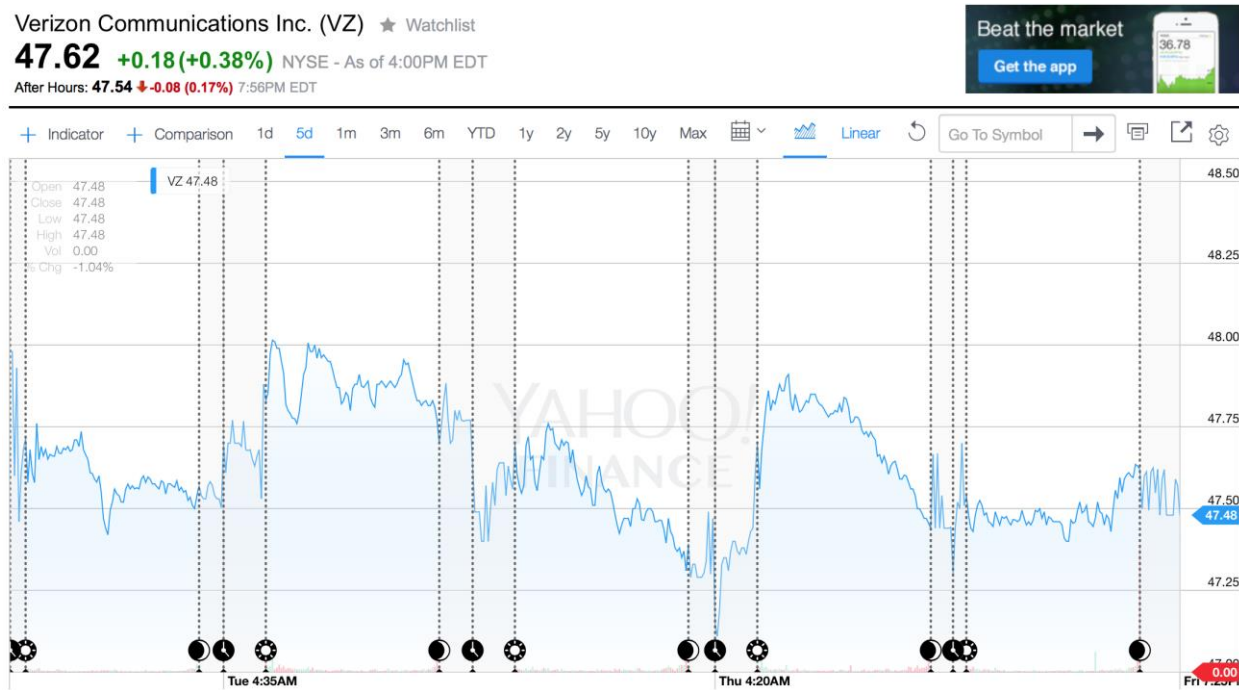


Figure 6.4.3 Verizon Communications Inc. Stock June 22nd, 2015—June 26th, 2015

6.4.4 ORCL Stock Week #4 Performance

Figure 6.4.4 shows the ORCL stock performance in Week #4. The ORCL stock price drops sharply on the first day in Week #4, and the stock price starts decreasing steadily since the second day of Week #4. The stock price is changing by -1.54% overall in 5 days.



Figure 6.4.4 Verizon Communications Inc. Stock June 22nd, 2015—June 26th, 2015

6.4.5 GIB Stock Week #4 Performance

Figure 6.4.5 provides the GIB stock performance in Week #4. The GIB stock decreases slowly since the first day of Week #4, and it reaches the lowest price on the third day of Week #4. However, the stock price goes up sharply on the fourth day of Week #4, and it keeps increasing on the fifth day of Week #4. The stock price is changing by 1.22% overall in 5 days.



Figure 6.4.5 CGI Group Inc. Stock June 22nd, 2015—June 26th, 2015

6.4.6 CTSH Stock Week #4 Performance

Figure 6.4.6 shows the CTSH stock performance in Week #4. The CTSH stock price fluctuates in Week #4, but the stock price increases steadily overall. Also, the stock price is changing by 2.12% overall.



Figure 6.4.6 Cognizant Technology Solutions Corp. Stock June 22nd, 2015—June 26th, 2015

6.4.7 SYMC Stock Week #4 Performance

Figure 6.4.7 provides the SYMC stock performance in Week #4. The SYMC stock price drops on the first day of Week #4. However, the price increases and does not fluctuate since the second day of Week #4, and it drops on the last day of Week #4. The stock price is changing by -0.79% overall.



Figure 6.4.7 Symantec Crop. Stock June 22nd, 2015—June 26th, 2015

6.4.8 Week #4 Stock Performances Conclusion

The EMC and DOX stocks have aggressively negative change on the stock prices, which are -2.12% and -1.60%. Also, ORCL stock is changing by -1.54%, VZ stock is changing by -1.04%. However, there are three stocks have positive change on stock prices, especially CTSH stock price changes by 2.12%, which increases 0.77% more than Week #3. GIB changes by 1.22%, and SYMC changes by 0.79%. The stock price change in Week #4 is relatively more steadily and less negatively aggressive comparing to the change in Week #3.

6.5 SIMULATION WEEK #5

Since the Day Trading and Swing Trading methods are used for simulations, the weekly stock performance, including four days per week, for each company in the portfolio will be captured as following for Week #5. There are only four-day simulations in Week #5 due to the holiday of July 4th.

6.5.1 EMC Stock Week #5 Performance

Figure 6.5.1 shows the overall performance of EMC stock, which fluctuates aggressively in since the first day of Week #5. However the stock price did not change much in the fourth day of Week #5. The stock price is changing by -1.85% overall in 5 days (from Jun 26th—July 2nd).



Figure 6.5.1 EMC Corp. Stock June 29th, 2015—July 2nd, 2015

6.5.2 DOX Stock Week #5 Performance

Figure 6.5.2 provides the DOX stock performance. DOX stock price decreases aggressively since the first day of Week #5. However, the price goes up dramatically in the third day of Week #5. Also, the stock price does not change much in the last two days of Week #5. The DOX stock price is changing by -0.86% overall in 5 days (from Jun 26th—July 2nd).

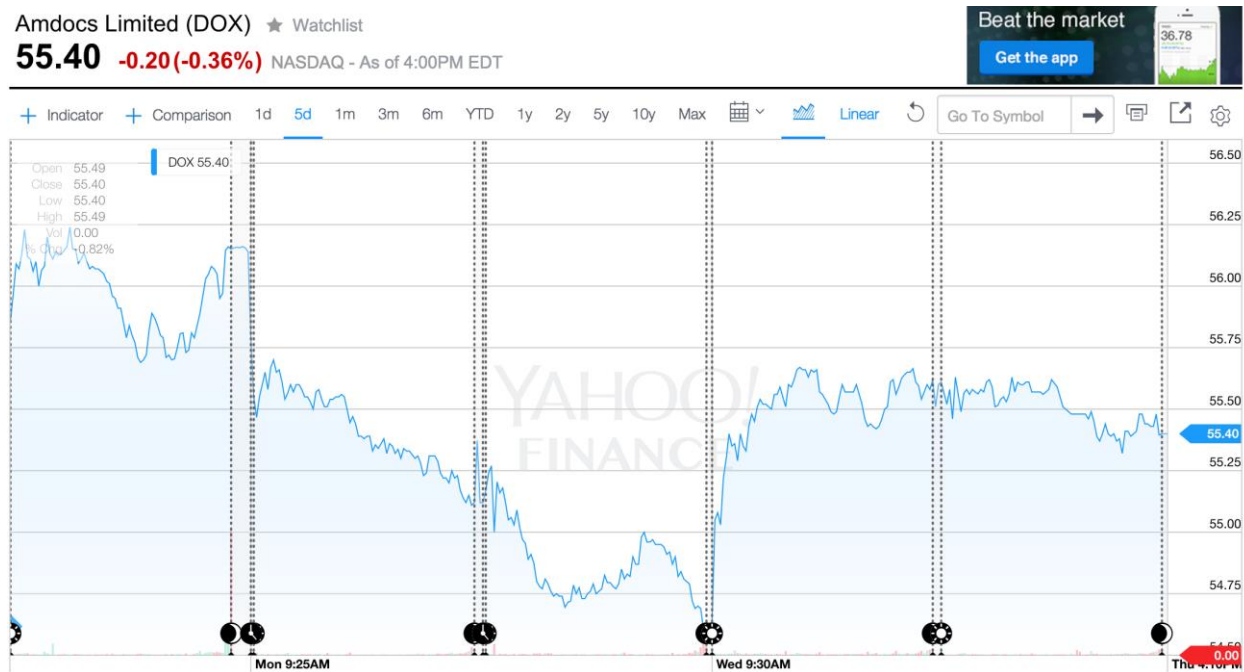


Figure 6.5.2 Amdocs Limited Stock June 29th, 2015—July 2nd, 2015

6.5.3 VZ Stock Week #5 Performance

Figure 6.5.3 gives the Week #5 VZ stock performance. The VZ stock drops dramatically in the first day of Week #5, and it fluctuates in the second day of Week #5. However, the stock price increases slowly in the last two days of Week #5. In addition, the VZ stock price stays almost flat in the last day of Week #5. The stock price is changing by -0.11% overall in 5 days (from June 26th—July 2nd).



Figure 6.5.3 Verizon Communications Inc. Stock June 29th, 2015—July 2nd, 2015

6.5.4 ORCL Stock Week #5 Performance

Figure 6.5.4 shows the ORCL stock performance in Week #5. The ORCL stock price fluctuates since the first day of Week #5, and the price changes dramatically during after-hour trading. However, the stock price does not change aggressively in the last day of Week #5. The stock price is changing by -1.92% overall in 5 days (from Jun 26th—July 2nd).

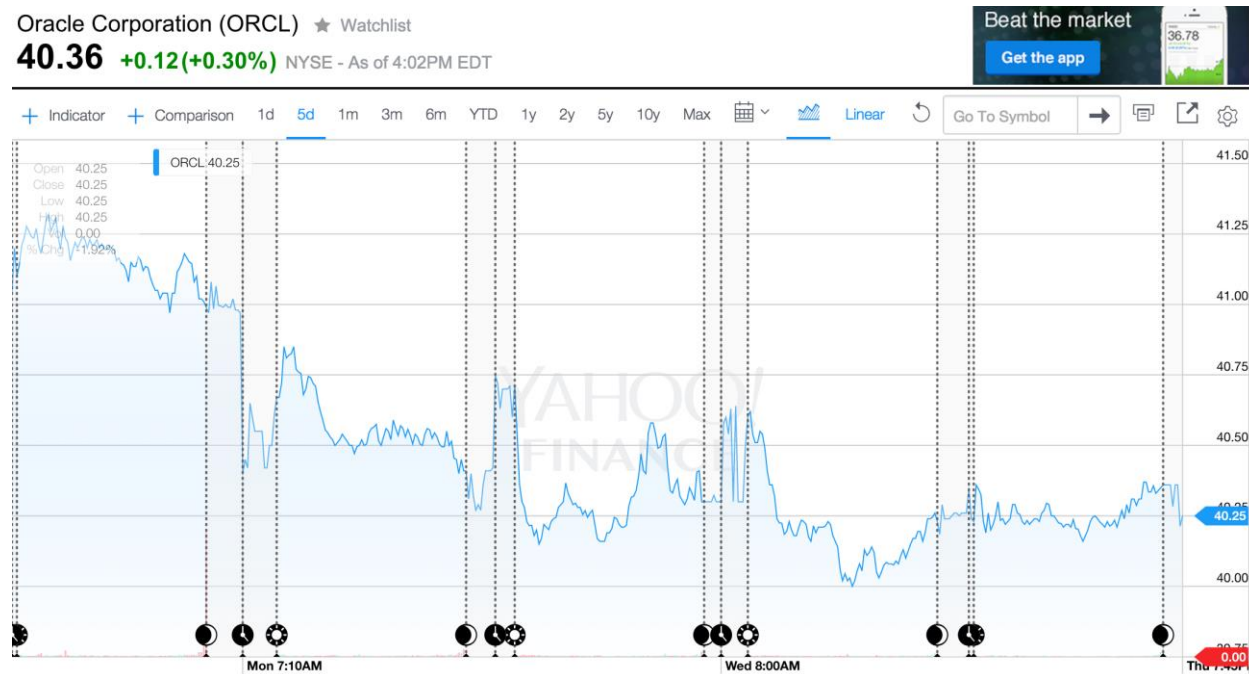


Figure 6.5.4 Verizon Communications Inc. Stock June 29th, 2015—July 2nd, 2015

6.5.5 GIB Stock Week #5 Performance

Figure 6.5.5 provides the GIB stock performance in Week #5. The GIB stock decreases slowly in the first day of Week #5, but it stays flatly in the second and the third day of Week #5. However, unlike other stocks, GIB stock prices increases dramatically in the last day of Week #5. The stock price is changing by -3.61% overall in 5 days (from Jun 26th—July 2nd).



Figure 6.5.5 CGI Group Inc. Stock June 29th, 2015—July 2nd, 2015

6.5.6 CTSH Stock Week #5 Performance

Figure 6.5.6 shows the CTSH stock performance in Week #5. The CTSH stock price does not fluctuate aggressively in the first three days of Week #5, but it decreased dramatically in the last day of Week #5 when the market opens. Also, the stock price is changing by -5.08% overall (from Jun 26th—July 2nd).



Figure 6.5.6 Cognizant Technology Solutions Corp. Stock June 29th, 2015—July 2nd, 2015

6.5.7 SYMC Stock Week #5 Performance

Figure 6.5.7 provides the SYMC stock performance in Week #5. The SYMC stock price decreases throughout the whole Week #5 overall. Even though the stock price fluctuates in Week #5 as well. The stock price is changing by -5.20% overall (from Jun 26th—July 2nd).

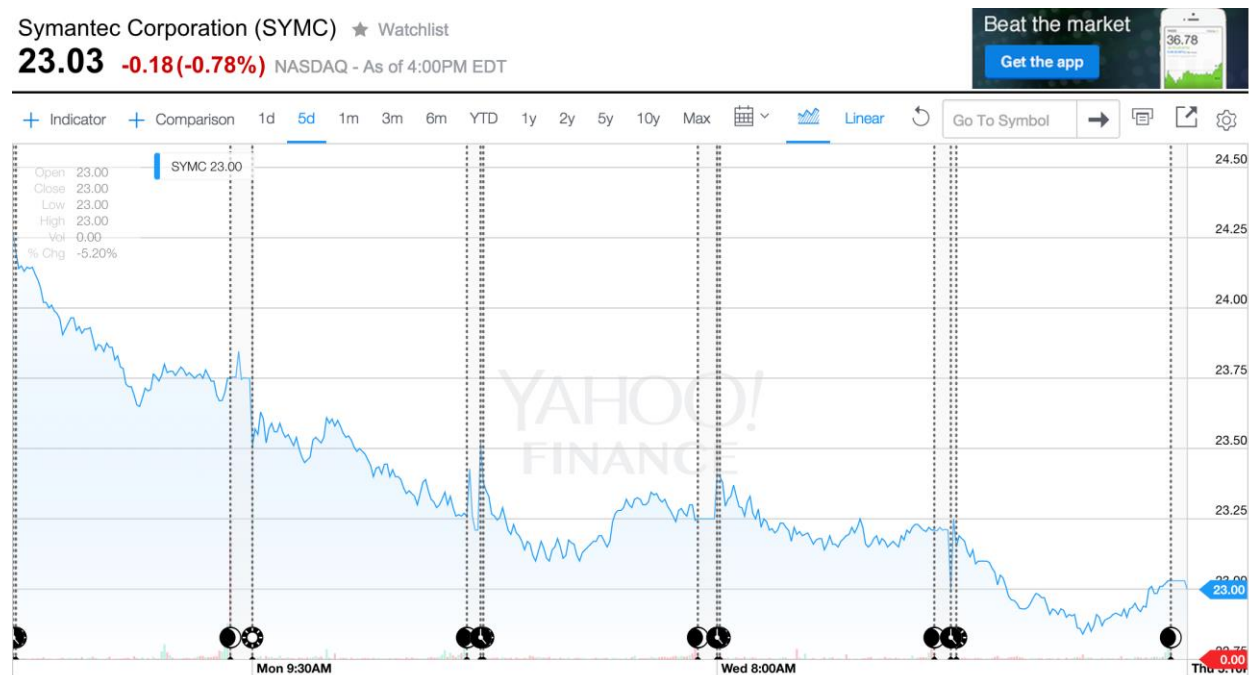


Figure 6.5.7 Symantec Crop. Stock June 29th, 2015—July 2nd, 2015

6.5.8 Week #5 Stock Performances Conclusion

All of the seven stocks have negative changes on the stock prices because the changes are calculated by the range of five days (from Jun 26th—July 2nd). Comparing to the stock prices from last week, all of the seven stock prices decrease in Week #5. However, EMC and DOX stock price has increased since the first day of Week #5, even though both stocks have negative changes on their stock price due to the impacts of their stock prices from last week. EMC, DOX, VZ, and ORCL stocks price almost stay flat in the last day of Week #5. However, GIB and CTSH stocks

have dramatic changes on stock prices in the last day of Week #5 when the stock market opens.

Also, SYMC stock decreases throughout the whole Week #5.

7. Simulation I—Day Trading Strategy

7.1 SIMULATION WEEK #1 RESULT

In the first week of simulation, I researched and learned the simulation tool in the first day, and there are four actual simulation days in Week #1.

7.1.1 Day 1 Transaction Result

The total initial investment money available is \$100,000, and I invested the initial investment money to the seven stocks accordingly. The total profit I gained from buying/selling each stock is negative, and most losses are from CTSH stock, which the total profits gained from it is -\$134.94. Table 7.1.1 shows the transaction of Day 1.

Date	Symbol	BUY/ SELL	Price	Shares	Net Cost/Proceeds	Profit/Loss	Total Cash	Total Profit
6/2/15							\$100,000.00	
6/2/15	CTSH	BUY	\$65.86	519	\$34,181.34		\$65,818.66	
6/2/15	CTSH	SELL	\$65.60	519	\$34,046.40	-\$134.94	\$99,865.06	-\$134.94
6/2/15	DOX	BUY	\$56.16	251	\$14,096.16		\$85,768.90	
6/2/15	DOX	SELL	\$56.00	251	\$14,056.00	-\$40.16	\$99,824.90	-\$175.10
6/2/15	EMC	BUY	\$26.75	301	\$8,051.75		\$91,773.15	
6/2/15	EMC	SELL	\$26.68	301	\$8,030.68	-\$21.07	\$99,803.83	-\$196.17
6/2/15	ORCL	BUY	\$43.81	214	\$9,375.34		\$90,428.49	
6/2/15	ORCL	SELL	\$43.70	214	\$9,351.80	-\$23.54	\$99,780.29	-\$219.71
6/2/15	SYMC	BUY	\$24.66	136	\$3,353.76		\$96,426.53	
6/2/15	SYMC	SELL	\$24.36	136	\$3,312.96	-\$40.80	\$99,739.49	-\$260.51
6/2/15	VZ	BUY	\$49.28	286	\$14,094.08		\$85,645.41	
6/2/15	VZ	SELL	\$49.14	286	\$14,054.04	-\$40.04	\$99,699.45	-\$300.55
6/2/15	GIB	BUY	\$42.25	206	\$8,703.50		\$90,995.95	
6/2/15	GIB	SELL	\$42.28	206	\$8,709.68	\$6.18	\$99,705.63	-\$294.37

Table 7.1.1 Day Trading Transaction Chart in Day 1—Week #1

7.1.2 Day 2 Transaction Result

The total investment money available is \$99,705.63 from Day 1 and I invested the investment money to the seven stocks proportionally. For example, the CTSH stock increased in Day 1, and it should be increasing in Day 2, so I brought more CTSH stocks. The total profit I gained from buying/selling each stock is positive, and most gains are from GIB stock and CTSH stock, which the total profits gained from them are \$205.74 and \$136.00. Table 7.1.2 provides the transaction result of Day 2, which is shown below.

Date	Symbol	BUY/ SELL	Price	Shares	Net Cost/Proceeds	Profit/Loss	Total Cash	Total Profit
6/3/15							\$99,705.63	
6/3/15	CTSH	BUY	\$65.39	400	\$26,156.00		\$73,549.63	
6/3/15	CTSH	SELL	\$65.73	400	\$26,292.00	\$136.00	\$99,841.63	\$136.00
6/3/15	DOX	BUY	\$56.42	236	\$13,315.12		\$86,526.51	
6/3/15	DOX	SELL	\$56.47	236	\$13,326.92	\$11.80	\$99,853.43	\$147.80
6/3/15	EMC	BUY	\$26.68	286	\$7,630.48		\$92,222.95	
6/3/15	EMC	SELL	\$26.72	286	\$7,641.92	\$11.44	\$99,864.87	\$159.24
6/3/15	ORCL	BUY	\$43.67	150	\$6,550.50		\$93,314.37	
6/3/15	ORCL	SELL	\$43.98	150	\$6,597.00	\$46.50	\$99,911.37	\$205.74
6/3/15	SYMC	BUY	\$24.42	124	\$3,028.08		\$96,883.29	
6/3/15	SYMC	SELL	\$24.29	124	\$3,011.96	-\$16.12	\$99,895.25	\$189.62
6/3/15	VZ	BUY	\$49.28	300	\$14,784.00		\$85,111.25	
6/3/15	VZ	SELL	\$49.09	300	\$14,727.00	-\$57.00	\$99,838.25	\$132.62
6/3/15	GIB	BUY	\$42.18	251	\$10,587.18		\$89,251.07	
6/3/15	GIB	SELL	\$43.00	251	\$10,793.00	\$205.82	\$100,044.07	\$338.44

Table 7.1.2 Day Trading Transaction Chart in Day 2—Week #1

7.1.3 Day 3 Transaction Result

The total investment money available is \$100,044.07 from Day 2 and I invested the investment money to the seven stocks almost equally in Day 3. The total profit I gained from buying/selling each stock is negative, and most losses are from CTSH stock and EMC stock, which the total profits gained from them are -\$285.95 and -\$205.82. Table 7.1.3 is the transaction result of Day 3, which is shown below.

Date	Symbol	BUY/ SELL	Price	Shares	Net Cost/Proceeds	Profit/Loss	Total Cash	Total Profit
6/4/15							\$100,044.07	
6/4/15	CTSH	BUY	\$65.36	301	\$19,673.36		\$80,370.71	
6/4/15	CTSH	SELL	\$64.41	301	\$19,387.41	-\$285.95	\$99,758.12	-\$285.95
6/4/15	DOX	BUY	\$56.25	201	\$11,306.25		\$88,451.87	
6/4/15	DOX	SELL	\$55.79	201	\$11,213.79	-\$92.46	\$99,665.66	-\$378.41
6/4/15	EMC	BUY	\$27.80	251	\$6,977.80		\$92,687.86	
6/4/15	EMC	SELL	\$26.98	251	\$6,771.98	-\$205.82	\$99,459.84	-\$584.23
6/4/15	ORCL	BUY	\$43.85	214	\$9,383.90		\$90,075.94	
6/4/15	ORCL	SELL	\$43.70	214	\$9,351.80	-\$32.10	\$99,427.74	-\$616.33
6/4/15	SYMC	BUY	\$24.21	201	\$4,866.21		\$94,561.53	
6/4/15	SYMC	SELL	\$24.03	201	\$4,830.03	-\$36.18	\$99,391.56	-\$652.51
6/4/15	VZ	BUY	\$48.06	305	\$14,658.30		\$84,733.26	
6/4/15	VZ	SELL	\$48.00	305	\$14,640.00	-\$18.30	\$99,373.26	-\$670.81
6/4/15	GIB	BUY	\$42.85	298	\$12,769.30		\$86,603.96	
6/4/15	GIB	SELL	\$42.44	298	\$12,647.12	-\$122.18	\$99,251.08	-\$792.99

Table 7.1.3 Day Trading Transaction Chart in Day 3—Week #1

7.1.4 Day 4 Transaction Result

The total investment money available is \$99,251.08 from Day 3 and I invested the investment money to the seven stocks in Day 4. The total profit I gained from buying/selling each stock is positive, and most gains are from EMC stock, which the total profits gained from it is \$58.80. Table 7.1.4 is the transaction result of Day 4, which is shown below.

Date	Symbol	BUY/ SELL	Price	Shares	Net Cost/Proceeds	Profit/Loss	Total Cash	Total Profit
6/5/15							\$99,251.08	
6/5/15	CTSH	BUY	\$64.63	276	\$17,837.88		\$81,413.20	
6/5/15	CTSH	SELL	\$64.68	276	\$17,851.68	\$13.80	\$99,264.88	\$13.80
6/5/15	DOX	BUY	\$56.17	498	\$27,972.66		\$71,292.22	
6/5/15	DOX	SELL	\$56.18	498	\$27,977.64	\$4.98	\$99,269.86	\$18.78
6/5/15	EMC	BUY	\$27.21	588	\$15,999.48		\$83,270.38	
6/5/15	EMC	SELL	\$27.31	588	\$16,058.28	\$58.80	\$99,328.66	\$77.58
6/5/15	ORCL	BUY	\$43.80	243	\$10,643.40		\$88,685.26	
6/5/15	ORCL	SELL	\$43.92	243	\$10,672.56	\$29.16	\$99,357.82	\$106.74
6/5/15	SYMC	BUY	\$24.07	201	\$4,838.07		\$94,519.75	
6/5/15	SYMC	SELL	\$24.03	201	\$4,830.03	-\$8.04	\$99,349.78	\$98.70
6/5/15	VZ	BUY	\$47.56	190	\$9,036.40		\$90,313.38	
6/5/15	VZ	SELL	\$47.22	190	\$8,971.80	-\$64.60	\$99,285.18	\$34.10
6/5/15	GIB	BUY	\$42.26	300	\$12,678.00		\$86,607.18	
6/5/15	GIB	SELL	\$42.31	300	\$12,693.00	\$15.00	\$99,300.18	\$49.10

Table 7.1.4 Day Trading Gain/Loss Chart in Day 4—Week #1

7.1.5 Week #1 Gain/Loss Conclusion

I had started the simulation with \$100,000 initial investment, and I have \$99,300.18 as total assets left by the end of Week #1 simulation. I gained negative profits on the first and third day of Week #1, and I gained positive profits on the second and fourth day of Week #1. However, my loss is more than my gain, so I did not make positive profit during the investment activities in Week #1.

7.2 SIMULATION WEEK #2 RESULT

7.2.1 Day 1 Transaction Result

The total initial investment money available is \$99,300.18 from Week #1, and I invested the investment money to the seven stocks accordingly. The total profit I gained from buying/selling each stock is negative, and most losses are from DOX stock and GIB stock, which the total profits gained from them are -\$138.84 and -\$122.18. Table 7.2.1 shows the transaction of Day 1.

Date	Symbol	BUY/ SELL	Price	Shares	Net Cost/Proceeds	Profit/Loss	Total Cash	Total Profit
6/8/15							\$99,300.18	
6/8/15	CTSH	BUY	\$64.20	151	\$9,694.20		\$89,605.98	
6/8/15	CTSH	SELL	\$63.69	151	\$9,617.19	-\$77.01	\$99,223.17	-\$77.01
6/8/15	DOX	BUY	\$56.52	267	\$15,090.84		\$84,132.33	
6/8/15	DOX	SELL	\$56.00	267	\$14,952.00	-\$138.84	\$99,084.33	-\$215.85
6/8/15	EMC	BUY	\$26.90	300	\$8,070.00		\$91,014.33	
6/8/15	EMC	SELL	\$26.76	300	\$8,028.00	-\$42.00	\$99,042.33	-\$257.85
6/8/15	ORCL	BUY	\$43.60	190	\$8,284.00		\$90,758.33	
6/8/15	ORCL	SELL	\$43.17	190	\$8,202.30	-\$81.70	\$98,960.63	-\$339.55
6/8/15	SYMC	BUY	\$23.79	250	\$5,947.50		\$93,013.13	
6/8/15	SYMC	SELL	\$23.49	250	\$5,872.50	-\$75.00	\$98,885.63	-\$414.55
6/8/15	VZ	BUY	\$47.50	231	\$10,972.50		\$87,913.13	
6/8/15	VZ	SELL	\$47.54	231	\$10,981.74	\$9.24	\$98,894.87	-\$405.31
6/8/15	GIB	BUY	\$41.57	298	\$12,387.86		\$86,507.01	
6/8/15	GIB	SELL	\$41.16	298	\$12,265.68	-\$122.18	\$98,772.69	-\$527.49

Table 7.2.1 Day Trading Transaction Chart in Day 1—Week #2

7.2.2 Day 2 Transaction Result

The total investment money available is \$99,705.63 from Day 1 and I invested the investment money to the seven stocks proportionally. The total profit I gained from buying/selling each stock is positive, and most gains are from CTSH stock and GIB stock, which the total profits gained from them are \$148.50 and \$148.50. Table 7.2.2 provides the transaction result of Day 2, which is shown below.

Date	Symbol	BUY/ SELL	Price	Shares	Net Cost/Proceeds	Profit/Loss	Total Cash	Total Profit
6/9/15							\$98,772.69	
6/9/15	CTSH	BUY	\$62.98	198	\$12,470.04		\$86,302.65	
6/9/15	CTSH	SELL	\$63.73	198	\$12,618.54	\$148.50	\$98,921.19	\$148.50
6/9/15	DOX	BUY	\$55.68	210	\$11,692.80		\$87,228.39	
6/9/15	DOX	SELL	\$55.81	210	\$11,720.10	\$27.30	\$98,948.49	\$175.80
6/9/15	EMC	BUY	\$26.66	378	\$10,077.48		\$88,871.01	
6/9/15	EMC	SELL	\$26.70	378	\$10,092.60	\$15.12	\$98,963.61	\$190.92
6/9/15	ORCL	BUY	\$42.98	231	\$9,928.38		\$89,035.23	
6/9/15	ORCL	SELL	\$43.05	231	\$9,944.55	\$16.17	\$98,979.78	\$207.09
6/9/15	SYMC	BUY	\$23.26	300	\$6,978.00		\$92,001.78	
6/9/15	SYMC	SELL	\$23.46	300	\$7,038.00	\$60.00	\$99,039.78	\$267.09
6/9/15	VZ	BUY	\$47.23	210	\$9,918.30		\$89,121.48	
6/9/15	VZ	SELL	\$47.44	210	\$9,962.40	\$44.10	\$99,083.88	\$311.19
6/9/15	GIB	BUY	\$41.18	198	\$8,153.64		\$90,930.24	
6/9/15	GIB	SELL	\$41.93	198	\$8,302.14	\$148.50	\$99,232.38	\$459.69

Table 7.2.2 Day Trading Transaction Chart in Day 2—Week #2

7.2.3 Day 3 Transaction Result

The total investment money available is \$99232.38 from Day 2 and I invested the investment money to the seven stocks almost equally for certain stocks in Day 3. The total profit I gained from buying/selling each stock is positive, and most gains are from CTSB stock and ORCL stock, which the total profits gained from them are \$262.45 and \$175.70. Table 7.2.3 is the transaction result of Day 3, which is shown below.

Date	Symbol	BUY/ SELL	Price	Shares	Net Cost/Proceeds	Profit/Loss	Total Cash	Total Profit
6/10/15							\$99,232.38	
6/10/15	CTSH	BUY	\$63.42	145	\$9,195.90		\$90,036.48	
6/10/15	CTSH	SELL	\$65.23	145	\$9,458.35	\$262.45	\$99,494.83	\$262.45
6/10/15	DOX	BUY	\$56.43	210	\$11,850.30		\$87,644.53	
6/10/15	DOX	SELL	\$56.55	210	\$11,875.50	\$25.20	\$99,520.03	\$287.65
6/10/15	EMC	BUY	\$26.83	321	\$8,612.43		\$90,907.60	
6/10/15	EMC	SELL	\$27.01	321	\$8,670.21	\$57.78	\$99,577.81	\$345.43
6/10/15	ORCL	BUY	\$43.20	251	\$10,843.20		\$88,734.61	
6/10/15	ORCL	SELL	\$43.90	251	\$11,018.90	\$175.70	\$99,753.51	\$521.13
6/10/15	SYMC	BUY	\$23.62	311	\$7,345.82		\$92,407.69	
6/10/15	SYMC	SELL	\$23.80	311	\$7,401.80	\$55.98	\$99,809.49	\$577.11
6/10/15	VZ	BUY	\$47.48	187	\$8,878.76		\$90,930.73	
6/10/15	VZ	SELL	\$47.43	187	\$8,869.41	-\$9.35	\$99,800.14	\$567.76
6/10/15	GIB	BUY	\$42.52	201	\$8,546.52		\$91,253.62	
6/10/15	GIB	SELL	\$42.97	201	\$8,636.97	\$90.45	\$99,890.59	\$658.21

Table 7.2.3 Day Trading Transaction Chart in Day 3—Week #2

7.2.4 Day 4 Transaction Result

The total investment money available is \$99,890.59 from Day 3 and I invested the investment money to the seven stocks in Day 4. The total profit I gained from buying/selling each stock is almost positive, and most gains are from EMC stock and GIB stock, which the total profits gained from them are \$52.50 and \$52.00. However, I still lost some money on DOX stock, which is -\$26.78. Table 7.2.4 is the transaction result of Day 4, which is shown below.

Date	Symbol	BUY/ SELL	Price	Shares	Net Cost/Proceeds	Profit/Loss	Total Cash	Total Profit
6/11/15							\$99,890.59	
6/11/15	CTSH	BUY	\$64.54	122	\$7,873.88		\$92,016.71	
6/11/15	CTSH	SELL	\$64.55	122	\$7,875.10	\$1.22	\$99,891.81	\$1.22
6/11/15	DOX	BUY	\$56.92	200	\$11,384.00		\$88,507.81	
6/11/15	DOX	SELL	\$56.78	200	\$11,356.00	-\$28.00	\$99,863.81	-\$26.78
6/11/15	EMC	BUY	\$27.17	350	\$9,509.50		\$90,354.31	
6/11/15	EMC	SELL	\$27.32	350	\$9,562.00	\$52.50	\$99,916.31	\$25.72
6/11/15	ORCL	BUY	\$44.30	243	\$10,764.90		\$89,151.41	
6/11/15	ORCL	SELL	\$44.30	243	\$10,764.90	\$0.00	\$99,916.31	\$25.72
6/11/15	SYMC	BUY	\$23.74	278	\$6,599.72		\$93,316.59	
6/11/15	SYMC	SELL	\$23.82	278	\$6,621.96	\$22.24	\$99,938.55	\$47.96
6/11/15	VZ	BUY	\$47.68	200	\$9,536.00		\$90,402.55	
6/11/15	VZ	SELL	\$47.83	200	\$9,566.00	\$30.00	\$99,968.55	\$77.96
6/11/15	GIB	BUY	\$42.43	260	\$11,031.80		\$88,936.75	
6/11/15	GIB	SELL	\$42.63	260	\$11,083.80	\$52.00	\$100,020.55	\$129.96

Table 7.2.4 Day Trading Gain/Loss Chart in Day 4—Week #2

7.2.5 Day 5 Transaction Result

The total investment money available is \$100,020.55 from Day 4 and I invested the investment money to the seven stocks in Day 5. The total profit I gained from buying/selling each stock is mostly negative, and most losses are from VZ stock and EMC stock, which the total profits gained from them are -\$47.50 and -\$22.24. However, I still gained positive profit from GIB, which is \$98.00. Table 7.2.5 is the transaction result of Day 5, which is shown below.

Date	Symbol	BUY/ SELL	Price	Shares	Net Cost/Proceeds	Profit/Loss	Total Cash	Total Profit
6/12/15							\$100,020.55	
6/12/15	CTSH	BUY	\$63.99	100	\$6,399.00		\$93,621.55	
6/12/15	CTSH	SELL	\$63.86	100	\$6,386.00	-\$13.00	\$100,007.55	-\$13.00
6/12/15	DOX	BUY	\$56.53	150	\$8,479.50		\$91,528.05	
6/12/15	DOX	SELL	\$56.47	150	\$8,470.50	-\$9.00	\$99,998.55	-\$22.00
6/12/15	EMC	BUY	\$27.10	278	\$7,533.80		\$92,464.75	
6/12/15	EMC	SELL	\$27.02	278	\$7,511.56	-\$22.24	\$99,976.31	-\$44.24
6/12/15	ORCL	BUY	\$44.23	180	\$7,961.40		\$92,014.91	
6/12/15	ORCL	SELL	\$44.33	180	\$7,979.40	\$18.00	\$99,994.31	-\$26.24
6/12/15	SYMC	BUY	\$23.64	240	\$5,673.60		\$94,320.71	
6/12/15	SYMC	SELL	\$23.70	240	\$5,688.00	\$14.40	\$100,008.71	-\$11.84
6/12/15	VZ	BUY	\$47.56	190	\$9,036.40		\$90,972.31	
6/12/15	VZ	SELL	\$47.31	190	\$8,988.90	-\$47.50	\$99,961.21	-\$59.34
6/12/15	GIB	BUY	\$42.41	280	\$11,874.80		\$88,086.41	
6/12/15	GIB	SELL	\$42.76	280	\$11,972.80	\$98.00	\$100,059.21	\$38.66

Table 7.2.5 Day Trading Gain/Loss Chart in Day 5—Week #2

7.2.6 Week #2 Gain/Loss Conclusion

I had started the simulation with \$99,300.18 from Week #1, and I have \$100,059.21 as total cash left by the end of Week #2 simulation. The profits of Week #2 is positive, and I made positive profits regarding the initial \$100,000 investment money.

7.3 SIMULATION WEEK #3 RESULT

7.3.1 Day 1 Transaction Result

The total initial investment money available is \$100,059.21 from Week #2, and I invested the investment money to the seven stocks accordingly. The total profit I gained from buying/selling each stock is positive, and most gains are from EMC stock and ORCL stock, which the total profit gained are \$102.00 and \$57.00. Table 7.3.1 shows the transaction of Day 1.

Date	Symbol	BUY/ SELL	Price	Shares	Net Cost/Proceeds	Profit/Loss	Total Cash	Total Profit
6/15/15							\$100,059.21	
6/15/15	CTSH	BUY	\$62.72	200	\$12,544.00		\$87,515.21	
6/15/15	CTSH	SELL	\$62.78	200	\$12,556.00	\$12.00	\$100,071.21	\$12.00
6/15/15	DOX	BUY	\$55.71	267	\$14,874.57		\$85,196.64	
6/15/15	DOX	SELL	\$55.78	267	\$14,893.26	\$18.69	\$100,089.90	\$30.69
6/15/15	EMC	BUY	\$26.58	300	\$7,974.00		\$92,115.90	
6/15/15	EMC	SELL	\$26.92	300	\$8,076.00	\$102.00	\$100,191.90	\$132.69
6/15/15	ORCL	BUY	\$43.51	300	\$13,053.00		\$87,138.90	
6/15/15	ORCL	SELL	\$43.70	300	\$13,110.00	\$57.00	\$100,248.90	\$189.69
6/15/15	SYMC	BUY	\$23.36	250	\$5,840.00		\$94,408.90	
6/15/15	SYMC	SELL	\$23.50	250	\$5,875.00	\$35.00	\$100,283.90	\$224.69
6/15/15	VZ	BUY	\$47.04	231	\$10,866.24		\$89,417.66	
6/15/15	VZ	SELL	\$47.00	231	\$10,857.00	-\$9.24	\$100,274.66	\$215.45
6/15/15	GIB	BUY	\$42.17	298	\$12,566.66		\$87,708.00	
6/15/15	GIB	SELL	\$42.20	298	\$12,575.60	\$8.94	\$100,283.60	\$224.39

Table 7.3.1 Day Trading Transaction Chart in Day 1—Week #3

7.3.2 Day 2 Transaction Result

The total investment money available is \$100,283.60 from Day 1 and I invested the investment money to the seven stocks proportionally. The total profit I gained from buying/selling each stock is positive, and most gains are from ORCL stock and DOX stock, which the total profit gained are \$126.90 and \$81.60. Table 7.3.2 provides the transaction result of Day 2, which is shown below.

Date	Symbol	BUY/ SELL	Price	Shares	Net Cost/Proceeds	Profit/Loss	Total Cash	Total Profit
6/16/15							\$100,283.60	
6/16/15	CTSH	BUY	\$62.38	210	\$13,099.80		\$87,183.80	
6/16/15	CTSH	SELL	\$62.75	210	\$13,177.50	\$77.70	\$100,361.30	\$77.70
6/16/15	DOX	BUY	\$55.63	340	\$18,914.20		\$81,447.10	
6/16/15	DOX	SELL	\$55.87	340	\$18,995.80	\$81.60	\$100,442.90	\$159.30
6/16/15	EMC	BUY	\$26.92	310	\$8,345.20		\$92,097.70	
6/16/15	EMC	SELL	\$27.15	310	\$8,416.50	\$71.30	\$100,514.20	\$230.60
6/16/15	ORCL	BUY	\$44.28	270	\$11,955.60		\$88,558.60	
6/16/15	ORCL	SELL	\$44.75	270	\$12,082.50	\$126.90	\$100,641.10	\$357.50
6/16/15	SYMC	BUY	\$23.47	256	\$6,008.32		\$94,632.78	
6/16/15	SYMC	SELL	\$23.63	256	\$6,049.28	\$40.96	\$100,682.06	\$398.46
6/16/15	VZ	BUY	\$47.08	210	\$9,886.80		\$90,795.26	
6/16/15	VZ	SELL	\$47.44	210	\$9,962.40	\$75.60	\$100,757.66	\$474.06
6/16/15	GIB	BUY	\$41.97	150	\$6,295.50		\$94,462.16	
6/16/15	GIB	SELL	\$41.85	150	\$6,277.50	-\$18.00	\$100,739.66	\$456.06

Table 7.3.2 Day Trading Transaction Chart in Day 2—Week #3

7.3.3 Day 3 Transaction Result

The total investment money available is \$100,739.66 from Day 2 and I invested the investment money to the seven stocks almost equally for certain stocks in Day 3. The total profit I gained from buying/selling each stock is positive, and most gains are from ORCL stock, which the total profit gained is \$189.21. Table 7.3.3 is the transaction result of Day 3, which is shown below.

Date	Symbol	BUY/ SELL	Price	Shares	Net Cost/Proceeds	Profit/Loss	Total Cash	Total Profit
6/17/15							\$100,739.66	
6/17/15	CTSH	BUY	\$62.51	251	\$15,690.01		\$85,049.65	
6/17/15	CTSH	SELL	\$62.21	251	\$15,614.71	-\$75.30	\$100,664.36	-\$75.30
6/17/15	DOX	BUY	\$55.79	351	\$19,582.29		\$81,082.07	
6/17/15	DOX	SELL	\$55.78	351	\$19,578.78	-\$3.51	\$100,660.85	-\$78.81
6/17/15	EMC	BUY	\$27.16	350	\$9,506.00		\$91,154.85	
6/17/15	EMC	SELL	\$27.28	350	\$9,548.00	\$42.00	\$100,702.85	-\$36.81
6/17/15	ORCL	BUY	\$44.66	371	\$16,568.86		\$84,133.99	
6/17/15	ORCL	SELL	\$45.17	371	\$16,758.07	\$189.21	\$100,892.06	\$152.40
6/17/15	SYMC	BUY	\$23.97	311	\$7,454.67		\$93,437.39	
6/17/15	SYMC	SELL	\$24.09	311	\$7,491.99	\$37.32	\$100,929.38	\$189.72
6/17/15	VZ	BUY	\$47.34	278	\$13,160.52		\$87,768.86	
6/17/15	VZ	SELL	\$47.26	278	\$13,138.28	-\$22.24	\$100,907.14	\$167.48
6/17/15	GIB	BUY	\$41.87	145	\$6,071.15		\$94,835.99	
6/17/15	GIB	SELL	\$41.91	145	\$6,076.95	\$5.80	\$100,912.94	\$173.28

Table 7.3.3 Day Trading Transaction Chart in Day 3—Week #3

7.3.4 Day 4 Transaction Result

The total investment money available is \$100,912.94 from Day 3 and I invested the investment money to the seven stocks in Day 4. The total profit I gained from buying/selling each stock is positive, and most gains are from ORCL stock, which the total profit gained from it is \$154.00. However, I still lost some money on GIB stock, which is -\$84.05. Table 7.3.4 is the transaction result of Day 4, which is shown below.

Date	Symbol	BUY/ SELL	Price	Shares	Net Cost/Proceeds	Profit/Loss	Total Cash	Total Profit
6/18/15							\$100,912.94	
6/18/15	CTSH	BUY	\$63.25	300	\$18,975.00		\$81,937.94	
6/18/15	CTSH	SELL	\$63.37	300	\$19,011.00	\$36.00	\$100,948.94	\$36.00
6/18/15	DOX	BUY	\$55.84	351	\$19,599.84		\$81,349.10	
6/18/15	DOX	SELL	\$55.92	351	\$19,627.92	\$28.08	\$100,977.02	\$64.08
6/18/15	EMC	BUY	\$27.22	300	\$8,166.00		\$92,811.02	
6/18/15	EMC	SELL	\$27.47	300	\$8,241.00	\$75.00	\$101,052.02	\$139.08
6/18/15	ORCL	BUY	\$41.97	200	\$8,394.00		\$92,658.02	
6/18/15	ORCL	SELL	\$42.74	200	\$8,548.00	\$154.00	\$101,206.02	\$293.08
6/18/15	SYMC	BUY	\$24.33	180	\$4,379.40		\$96,826.62	
6/18/15	SYMC	SELL	\$24.47	180	\$4,404.60	\$25.20	\$101,231.22	\$318.28
6/18/15	VZ	BUY	\$47.56	300	\$14,268.00		\$86,963.22	
6/18/15	VZ	SELL	\$47.78	300	\$14,334.00	\$66.00	\$101,297.22	\$384.28
6/18/15	GIB	BUY	\$41.94	205	\$8,597.70		\$92,699.52	
6/18/15	GIB	SELL	\$41.53	205	\$8,513.65	-\$84.05	\$101,213.17	\$300.23

Table 7.3.4 Day Trading Gain/Loss Chart in Day 4—Week #3

7.3.5 Day 5 Transaction Result

The total investment money available is \$100,020.55 from Day 4 and I invested the investment money to the seven stocks in Day 5. The total profit I gained from buying/selling each stock is negative, and most losses are from GIB stock and ORCL stock, which the total profits gained from them are -\$154.00 and -\$126.00. However, I still gained positive profit from DOX, which is \$132.00. Table 7.3.5 is the transaction result of Day 5, which is shown below.

Date	Symbol	BUY/ SELL	Price	Shares	Net Cost/Proceeds	Profit/Loss	Total Cash	Total Profit
6/19/15							\$101,213.17	
6/19/15	CTSH	BUY	\$63.14	250	\$15,785.00		\$85,428.17	
6/19/15	CTSH	SELL	\$62.76	250	\$15,690.00	-\$95.00	\$101,118.17	-\$95.00
6/19/15	DOX	BUY	\$55.95	300	\$16,785.00		\$84,333.17	
6/19/15	DOX	SELL	\$56.39	300	\$16,917.00	\$132.00	\$101,250.17	\$37.00
6/19/15	EMC	BUY	\$27.15	278	\$7,547.70		\$93,702.47	
6/19/15	EMC	SELL	\$27.10	278	\$7,533.80	-\$13.90	\$101,236.27	\$23.10
6/19/15	ORCL	BUY	\$42.42	180	\$7,635.60		\$93,600.67	
6/19/15	ORCL	SELL	\$41.72	180	\$7,509.60	-\$126.00	\$101,110.27	-\$102.90
6/19/15	SYMC	BUY	\$24.15	240	\$5,796.00		\$95,314.27	
6/19/15	SYMC	SELL	\$24.13	240	\$5,791.20	-\$4.80	\$101,105.47	-\$107.70
6/19/15	VZ	BUY	\$47.61	190	\$9,045.90		\$92,059.57	
6/19/15	VZ	SELL	\$47.49	190	\$9,023.10	-\$22.80	\$101,082.67	-\$130.50
6/19/15	GIB	BUY	\$41.20	280	\$11,536.00		\$89,546.67	
6/19/15	GIB	SELL	\$40.65	280	\$11,382.00	-\$154.00	\$100,928.67	-\$284.50

Table 7.3.5 Day Trading Gain/Loss Chart in Day 5—Week #3

7.3.6 Week #3 Gain/Loss Conclusion

I had started the simulation with \$100,059.21 from Week #2, and I have \$100,928.67 as total cash left by the end of Week #3 simulation. The profits of Week #3 is positive, and I made more positive profits from Week #2. The first four days, the total profits by the end of each day were always positive. However, almost all the stocks decrease, so I had negative profits for the last day of this week. Overall, the Day Trading method is earning profits by each week.

7.4 SIMULATION WEEK #4 RESULT

7.4.1 Day 1 Transaction Result

The total initial investment money available is \$100,928.67 from Week #3, and I invested the investment money to the seven stocks I have chosen. The total profit I gained from buying/selling each stock is positive, and most gains are from CTSB stock, which contributed to the total profit \$192.00. Table 7.4.1 shows the transaction of Day 1.

Date	Symbol	BUY/ SELL	Price	Shares	Net Cost/Proceeds	Profit/Loss	Total Cash	Total Profit
6/22/15							100,928.67	
6/22/15	CTSH	BUY	\$62.58	300	\$18,774.00		\$82,154.67	
6/22/15	CTSH	SELL	\$63.22	300	\$18,966.00	\$192.00	\$101,120.67	\$192.00
6/22/15	DOX	BUY	\$56.44	310	\$17,496.40		\$83,624.27	
6/22/15	DOX	SELL	\$56.50	310	\$17,515.00	\$18.60	\$101,139.27	\$210.60
6/22/15	EMC	BUY	\$27.24	210	\$5,720.40		\$95,418.87	
6/22/15	EMC	SELL	\$27.32	210	\$5,737.20	\$16.80	\$101,156.07	\$227.40
6/22/15	ORCL	BUY	\$41.87	150	\$6,280.50		\$94,875.57	
6/22/15	ORCL	SELL	\$41.64	150	\$6,246.00	-\$34.50	\$101,121.57	\$192.90
6/22/15	SYMC	BUY	\$23.78	250	\$5,945.00		\$95,176.57	
6/22/15	SYMC	SELL	\$23.83	250	\$5,957.50	\$12.50	\$101,134.07	\$205.40
6/22/15	VZ	BUY	\$47.66	180	\$8,578.80		\$92,555.27	
6/22/15	VZ	SELL	\$47.58	180	\$8,564.40	-\$14.40	\$101,119.67	\$191.00
6/22/15	GIB	BUY	\$41.40	300	\$12,420.00		\$88,699.67	
6/22/15	GIB	SELL	\$41.60	300	\$12,480.00	\$60.00	\$101,179.67	\$251.00

Table 7.4.1 Day Trading Transaction Chart in Day 1—Week #4

7.4.2 Day 2 Transaction Result

The total investment money available is \$101,179.67 from Day 1 and I invested the investment money to the seven stocks proportionally. The total profit I gained from buying/selling each stock is positive, and most gains are from SYMC stock, which the total profit gained \$61.60.

Table 7.4.2 provides the transaction result of Day 2, which is shown below.

Date	Symbol	BUY/ SELL	Price	Shares	Net Cost/Proceeds	Profit/Loss	Total Cash	Total Profit
6/23/15							\$101,179.67	
6/23/15	CTSH	BUY	\$63.14	280	\$17,679.20		\$83,500.47	
6/23/15	CTSH	SELL	\$63.18	280	\$17,690.40	\$11.20	\$101,190.87	\$11.20
6/23/15	DOX	BUY	\$56.25	300	\$16,875.00		\$84,315.87	
6/23/15	DOX	SELL	\$56.30	300	\$16,890.00	\$15.00	\$101,205.87	\$26.20
6/23/15	EMC	BUY	\$27.21	280	\$7,618.80		\$93,587.07	
6/23/15	EMC	SELL	\$27.43	280	\$7,680.40	\$61.60	\$101,267.47	\$87.80
6/23/15	ORCL	BUY	\$41.59	200	\$8,318.00		\$92,949.47	
6/23/15	ORCL	SELL	\$41.72	200	\$8,344.00	\$26.00	\$101,293.47	\$113.80
6/23/15	SYMC	BUY	\$24.02	280	\$6,725.60		\$94,567.87	
6/23/15	SYMC	SELL	\$24.25	280	\$6,790.00	\$64.40	\$101,357.87	\$178.20
6/23/15	VZ	BUY	\$47.85	200	\$9,570.00		\$91,787.87	
6/23/15	VZ	SELL	\$47.86	200	\$9,572.00	\$2.00	\$101,359.87	\$180.20
6/23/15	GIB	BUY	\$41.31	180	\$7,435.80		\$93,924.07	
6/23/15	GIB	SELL	\$41.00	180	\$7,380.00	-\$55.80	\$101,304.07	\$124.40

Table 7.4.2 Day Trading Transaction Chart in Day 2—Week #4

7.4.3 Day 3 Transaction Result

The total investment money available is \$101,359.87 from Day 2 and I invested the investment money to the seven stocks almost equally for certain stocks in Day 3. The total profit I gained from buying/selling each stock is negative, and most losses are from DOX stock, which contributed to the total profit -\$89.60. Table 7.4.3 is the transaction result of Day 3, which is shown below.

Date	Symbol	BUY/ SELL	Price	Shares	Net Cost/Proceeds	Profit/Loss	Total Cash	Total Profit
6/24/15							\$101,304.07	
6/24/15	CTSH	BUY	\$63.36	251	\$15,903.36		\$85,400.71	
6/24/15	CTSH	SELL	\$63.42	251	\$15,918.42	\$15.06	\$101,319.13	\$15.06
6/24/15	DOX	BUY	\$56.16	280	\$15,724.80		\$85,594.33	
6/24/15	DOX	SELL	\$55.84	280	\$15,635.20	-\$89.60	\$101,229.53	-\$74.54
6/24/15	EMC	BUY	\$27.53	300	\$8,259.00		\$92,970.53	
6/24/15	EMC	SELL	\$27.51	300	\$8,253.00	-\$6.00	\$101,223.53	-\$80.54
6/24/15	ORCL	BUY	\$41.63	250	\$10,407.50		\$90,816.03	
6/24/15	ORCL	SELL	\$41.33	250	\$10,332.50	-\$75.00	\$101,148.53	-\$155.54
6/24/15	SYMC	BUY	\$24.25	250	\$6,062.50		\$95,086.03	
6/24/15	SYMC	SELL	\$24.26	250	\$6,065.00	\$2.50	\$101,151.03	-\$153.04
6/24/15	VZ	BUY	\$47.61	180	\$8,569.80		\$92,581.23	
6/24/15	VZ	SELL	\$47.38	180	\$8,528.40	-\$41.40	\$101,109.63	-\$194.44
6/24/15	GIB	BUY	\$40.90	145	\$5,930.50		\$95,179.13	
6/24/15	GIB	SELL	\$40.75	145	\$5,908.75	-\$21.75	\$101,087.88	-\$216.19

Table 7.4.3 Day Trading Transaction Chart in Day 3—Week #4

7.4.4 Day 4 Transaction Result

The total investment money available is \$101,087.88 from Day 3 and I invested the investment money to the seven stocks in Day 4. The total profit I gained from buying/selling each stock is slightly negative, and most loss is from EMC stock, which contributed to the total profit - \$194.00. However, I still have gains from CTSH stock, which is \$75.06. Table 7.4.4 is the transaction result of Day 4, which is shown below.

Date	Symbol	BUY/ SELL	Price	Shares	Net Cost/Proceeds	Profit/Loss	Total Cash	Total Profit
6/25/15							\$101,087.88	
6/25/15	CTSH	BUY	\$63.56	278	\$17,669.68		\$83,418.20	
6/25/15	CTSH	SELL	\$63.83	278	\$17,744.74	\$75.06	\$101,162.94	\$75.06
6/25/15	DOX	BUY	\$55.95	325	\$18,183.75		\$82,979.19	
6/25/15	DOX	SELL	\$56.02	325	\$18,206.50	\$22.75	\$101,185.69	\$97.81
6/25/15	EMC	BUY	\$27.34	300	\$8,202.00		\$92,983.69	
6/25/15	EMC	SELL	\$27.06	300	\$8,118.00	-\$84.00	\$101,101.69	\$13.81
6/25/15	ORCL	BUY	\$41.30	260	\$10,738.00		\$90,363.69	
6/25/15	ORCL	SELL	\$41.19	260	\$10,709.40	-\$28.60	\$101,073.09	-\$14.79
6/25/15	SYMC	BUY	\$24.22	200	\$4,844.00		\$96,229.09	
6/25/15	SYMC	SELL	\$24.20	200	\$4,840.00	-\$4.00	\$101,069.09	-\$18.79
6/25/15	VZ	BUY	\$47.75	150	\$7,162.50		\$93,906.59	
6/25/15	VZ	SELL	\$47.64	150	\$7,146.00	-\$16.50	\$101,052.59	-\$35.29
6/25/15	GIB	BUY	\$41.25	200	\$8,250.00		\$92,802.59	
6/25/15	GIB	SELL	\$41.41	200	\$8,282.00	\$32.00	\$101,084.59	-\$3.29

Table 7.4.4 Day Trading Gain/Loss Chart in Day 4—Week #4

7.4.5 Day 5 Transaction Result

The total investment money available is \$101,084.59 from Day 4 and I invested the investment money to the seven stocks in Day 5. The total profit I gained from buying/selling each stock is slightly positive, and most gains are from GIB stock, which contributed to the total profit \$97.30. However, I did not gain much money from other stocks. Table 7.4.5 is the transaction result of Day 5, which is shown below.

Date	Symbol	BUY/ SELL	Price	Shares	Net Cost/Proceeds	Profit/Loss	Total Cash	Total Profit
6/26/15							\$101,084.59	
6/26/15	CTSH	BUY	\$63.89	290	\$18,528.10		\$82,556.49	
6/26/15	CTSH	SELL	\$63.91	290	\$18,533.90	\$5.80	\$101,090.39	\$5.80
6/26/15	DOX	BUY	\$56.10	310	\$17,391.00		\$83,699.39	
6/26/15	DOX	SELL	\$56.05	310	\$17,375.50	-\$15.50	\$101,074.89	-\$9.70
6/26/15	EMC	BUY	\$26.73	278	\$7,430.94		\$93,643.95	
6/26/15	EMC	SELL	\$26.51	278	\$7,369.78	-\$61.16	\$101,013.73	-\$70.86
6/26/15	ORCL	BUY	\$41.24	180	\$7,423.20		\$93,590.53	
6/26/15	ORCL	SELL	\$41.07	180	\$7,392.60	-\$30.60	\$100,983.13	-\$101.46
6/26/15	SYMC	BUY	\$23.89	100	\$2,389.00		\$98,594.13	
6/26/15	SYMC	SELL	\$23.77	100	\$2,377.00	-\$12.00	\$100,971.13	-\$113.46
6/26/15	VZ	BUY	\$47.45	200	\$9,490.00		\$91,481.13	
6/26/15	VZ	SELL	\$47.55	200	\$9,510.00	\$20.00	\$100,991.13	-\$93.46
6/26/15	GIB	BUY	\$41.22	278	\$11,459.16		\$89,531.97	
6/26/15	GIB	SELL	\$41.57	278	\$11,556.46	\$97.30	\$101,088.43	\$3.84

Table 7.4.5 Day Trading Gain/Loss Chart in Day 5—Week #4

7.4.6 Week #4 Gain/Loss Conclusion

I had started the simulation with \$100,928.67 from Week #3, and I have \$101,088.43 as total cash left by the end of Week #4 simulation. The profits of Week #4 is positive, and I made more positive profits from Week #3. The first three days, the total profits by the end of each day were always positive. However, all the stocks did not perform well in the last two days of Week #4, and there are no significant price changes on the fifth day of Week #4.

7.5 SIMULATION WEEK #5 RESULT

7.5.1 Day 1 Transaction Result

The total initial investment money available is \$101,088.43 from Week #5, and I invested the investment money to the seven stocks I have chosen. The total profit I gained from buying/selling each stock is negative, and most losses are from CTSB stock, which contributed to the total profit -\$160.00. Table 7.5.1 shows the transaction of Day 1.

Date	Symbol	BUY/ SELL	Price	Shares	Net Cost/Proceeds	Profit/Loss	Total Cash	Total Profit
6/29/15							101,088.43	
6/29/15	CTSH	BUY	\$62.42	250	\$15,605.00		\$85,483.43	
6/29/15	CTSH	SELL	\$61.78	250	\$15,445.00	-\$160.00	\$100,928.43	-\$160.00
6/29/15	DOX	BUY	\$55.57	250	\$13,892.50		\$87,035.93	
6/29/15	DOX	SELL	\$55.22	250	\$13,805.00	-\$87.50	\$100,840.93	-\$247.50
6/29/15	EMC	BUY	\$26.21	298	\$7,810.58		\$93,030.35	
6/29/15	EMC	SELL	\$26.06	298	\$7,765.88	-\$44.70	\$100,796.23	-\$292.20
6/29/15	ORCL	BUY	\$40.62	200	\$8,124.00		\$92,672.23	
6/29/15	ORCL	SELL	\$40.55	200	\$8,110.00	-\$14.00	\$100,782.23	-\$306.20
6/29/15	SYMC	BUY	\$23.53	180	\$4,235.40		\$96,546.83	
6/29/15	SYMC	SELL	\$23.35	180	\$4,203.00	-\$32.40	\$100,749.83	-\$338.60
6/29/15	VZ	BUY	\$47.44	150	\$7,116.00		\$93,633.83	
6/29/15	VZ	SELL	\$47.00	150	\$7,050.00	-\$66.00	\$100,683.83	-\$404.60
6/29/15	GIB	BUY	\$40.15	150	\$6,022.50		\$94,661.33	
6/29/15	GIB	SELL	\$40.01	150	\$6,001.50	-\$21.00	\$100,662.83	-\$425.60

Table 7.5.1 Day Trading Transaction Chart in Day 1—Week #5

7.5.2 Day 2 Transaction Result

The total investment money available is \$100,662.83 from Day 1 and I invested the investment money to the seven stocks proportionally. The total profit I gained from buying/selling each stock is positive, and most gains are from EMC stock, which contributed to the total profit by \$119.00. Table 7.5.2 provides the transaction result of Day 2, which is shown below.

Date	Symbol	BUY/ SELL	Price	Shares	Net Cost/Proceeds	Profit/Loss	Total Cash	Total Profit
6/30/15							\$100,662.83	
6/30/15	CTSH	BUY	\$61.07	280	\$17,099.60		\$83,563.23	
6/30/15	CTSH	SELL	\$61.41	280	\$17,194.80	\$95.20	\$100,758.03	\$95.20
6/30/15	DOX	BUY	\$55.05	270	\$14,863.50		\$85,894.53	
6/30/15	DOX	SELL	\$54.87	270	\$14,814.90	-\$48.60	\$100,709.43	\$46.60
6/30/15	EMC	BUY	\$26.15	350	\$9,152.50		\$91,556.93	
6/30/15	EMC	SELL	\$26.49	350	\$9,271.50	\$119.00	\$100,828.43	\$165.60
6/30/15	ORCL	BUY	\$40.22	250	\$10,055.00		\$90,773.43	
6/30/15	ORCL	SELL	\$40.49	250	\$10,122.50	\$67.50	\$100,895.93	\$233.10
6/30/15	SYMC	BUY	\$23.14	280	\$6,479.20		\$94,416.73	
6/30/15	SYMC	SELL	\$23.32	280	\$6,529.60	\$50.40	\$100,946.33	\$283.50
6/30/15	VZ	BUY	\$46.88	150	\$7,032.00		\$93,914.33	
6/30/15	VZ	SELL	\$46.95	150	\$7,042.50	\$10.50	\$100,956.83	\$294.00
6/30/15	GIB	BUY	\$39.33	180	\$7,079.40		\$93,877.43	
6/30/15	GIB	SELL	\$39.20	180	\$7,056.00	-\$23.40	\$100,933.43	\$270.60

Table 7.5.2 Day Trading Transaction Chart in Day 2—Week #5

7.5.3 Day 3 Transaction Result

The total investment money available is \$100,933.43 from Day 2 and I invested the investment money to the seven stocks almost equally for certain stocks in Day 3. The total profit I gained from buying/selling each stock is positive, and most losses are from VZ stock, which contributed to the total profit \$176.00. Table 7.5.3 is the transaction result of Day 3, which is shown below.

Date	Symbol	BUY/ SELL	Price	Shares	Net Cost/Proceeds	Profit/Loss	Total Cash	Total Profit
7/1/15							\$100,933.43	
7/1/15	CTSH	BUY	\$62.12	280	\$17,393.60		\$83,539.83	
7/1/15	CTSH	SELL	\$61.92	280	\$17,337.60	-\$56.00	\$100,877.43	-\$56.00
7/1/15	DOX	BUY	\$55.30	300	\$16,590.00		\$84,287.43	
7/1/15	DOX	SELL	\$55.59	300	\$16,677.00	\$87.00	\$100,964.43	\$31.00
7/1/15	EMC	BUY	\$26.28	350	\$9,198.00		\$91,766.43	
7/1/15	EMC	SELL	\$26.38	350	\$9,233.00	\$35.00	\$100,999.43	\$66.00
7/1/15	ORCL	BUY	\$40.32	200	\$8,064.00		\$92,935.43	
7/1/15	ORCL	SELL	\$40.10	200	\$8,020.00	-\$44.00	\$100,955.43	\$22.00
7/1/15	SYMC	BUY	\$23.21	245	\$5,686.45		\$95,268.98	
7/1/15	SYMC	SELL	\$23.21	245	\$5,686.45	\$0.00	\$100,955.43	\$22.00
7/1/15	VZ	BUY	\$46.48	200	\$9,296.00		\$91,659.43	
7/1/15	VZ	SELL	\$47.36	200	\$9,472.00	\$176.00	\$101,131.43	\$198.00
7/1/15	GIB	BUY	\$39.18	200	\$7,836.00		\$93,295.43	
7/1/15	GIB	SELL	\$39.23	200	\$7,846.00	\$10.00	\$101,141.43	\$208.00

Table 7.5.3 Day Trading Transaction Chart in Day 3—Week #5

7.5.4 Day 4 Transaction Result

The total investment money available is \$101,141.43 from Day 3 and I invested the investment money to the seven stocks in Day 4. The total profit I gained from buying/selling each stock is positive, and most gain is from CTSH stock, which contributed to the total profit \$525.00.

Table 7.5.4 is the transaction result of Day 4, which is shown below.

Date	Symbol	BUY/ SELL	Price	Shares	Net Cost/Proceeds	Profit/Loss	Total Cash	Total Profit
7/2/15							\$101,141.43	
7/2/15	CTSH	BUY	\$59.00	350	\$20,650.00		\$80,491.43	
7/2/15	CTSH	SELL	\$60.50	350	\$21,175.00	\$525.00	\$101,666.43	\$525.00
7/2/15	DOX	BUY	\$55.57	325	\$18,060.25		\$83,606.18	
7/2/15	DOX	SELL	\$55.40	325	\$18,005.00	-\$55.25	\$101,611.18	\$469.75
7/2/15	EMC	BUY	\$26.51	300	\$7,953.00		\$93,658.18	
7/2/15	EMC	SELL	\$26.50	300	\$7,950.00	-\$3.00	\$101,608.18	\$466.75
7/2/15	ORCL	BUY	\$40.22	250	\$10,055.00		\$91,553.18	
7/2/15	ORCL	SELL	\$40.37	250	\$10,092.50	\$37.50	\$101,645.68	\$504.25
7/2/15	SYMC	BUY	\$23.06	150	\$3,459.00		\$98,186.68	
7/2/15	SYMC	SELL	\$22.99	150	\$3,448.50	-\$10.50	\$101,635.18	\$493.75
7/2/15	VZ	BUY	\$47.29	200	\$9,458.00		\$92,177.18	
7/2/15	VZ	SELL	\$47.23	200	\$9,446.00	-\$12.00	\$101,623.18	\$481.75
7/2/15	GIB	BUY	\$38.56	250	\$9,640.00		\$91,983.18	
7/2/15	GIB	SELL	\$39.91	250	\$9,977.50	\$337.50	\$101,960.68	\$819.25

Table 7.5.4 Day Trading Gain/Loss Chart in Day 4—Week #5

7.5.5 Week #5 Gain/Loss Conclusion

I had started the simulation with \$101,088.43 from Week #4, and I have \$101,960.68 as total cash left by the end of Week #5 simulation. The profits of Week #5 is positive, and I made more positive profits from Week #3. The total profit by the end of the first day was negative, but I made positive profits in the last three days of Week #5. I made most of my positive profits in the last day of Week #5.

8. Simulation II—Swing Trading Strategy

8.1 SIMULATION WEEK #1 RESULT

8.1.1 Investment Result

The total initial investment money available is \$100,000, and I invested the initial investment money to the seven stocks accordingly. The total cost of buying all the stocks is \$91,672.37, and I had \$8,327.63 left as tangible money before I sold the stocks. I sold some VZ stocks on June 3rd, 2015 because the stock price went down, and I predicted that the price might went down in the future. For other stocks, I chose to hold because some of them were performing well, for example the DOX, EMC and ORCL stocks. However, the dramatically price drop of CTSH and VZ stocks caused the loss of the investment in Week #1. Table 8.1.1 is the transaction of Week #1. The investment result for Week #1 is shown.

Date	Symbol	BUY/ SELL	Price	Share	Net Cost/Proceeds	Profit/Loss	Total Cash	Total Profit
6/2/15							\$100,000.00	
6/2/15	CTSH	BUY	\$65.90	520	\$34,268.00		\$65,732.00	
6/2/15	CTSH	HOLD		519				
6/2/15	DOX	BUY	\$56.22	251	\$14,111.22		\$51,620.78	
6/2/15	DOX	HOLD		251				
6/2/15	EMC	BUY	\$26.73	301	\$8,045.73		\$43,575.05	
6/2/15	EMC	HOLD		301				
6/2/15	ORCL	BUY	\$43.81	214	\$9,375.34		\$34,199.71	
6/2/15	ORCL	HOLD		214				
6/2/15	SYMC	BUY	\$24.67	136	\$3,355.12		\$30,844.59	
6/2/15	SYMC	HOLD		136				
6/2/15	VZ	BUY	\$48.27	286	\$13,805.22		\$17,039.37	
6/2/15	VZ	HOLD		86				
6/2/15	VZ	SELL	\$49.14	200	\$9,828.00	\$174.00	\$26,867.37	\$174.00
6/2/15	GIB	BUY	\$42.29	206	\$8,711.74		\$18,155.63	
6/2/15	GIB	HOLD		206				

Table 8.1.1 Swing Trading Transaction Chart in Week #1

The total assets are the sums of price proceed of sold stocks, market values of holding stocks and tangible money. The profit is the actual gain of selling the stocks, which is \$192.00 in Week #1. The Loss is the difference between the total assets and initial investment money. Also, the percentage Gain/Loss is related to the initial \$100,000 investment, which is calculated by the Loss and differences between the initial investment and total assets.

8.1.2 Week #1 Gain/Loss Conclusion

I started the simulation with \$100,000 initial investment, and I have \$99,564.22 as total assets left by the end of Week #1 simulation. The profits of Week #1 is \$192.00, but I still have a Loss of \$435.78 based on the market values of holding stocks. Therefore, the percentage of Gain/Loss in Week #1 is -44% from the initial \$100,000 investment money, which is negatively higher than the percentage Gain/Loss via Day Trading method.

8.2 SIMULATION WEEK #2 RESULT

8.2.1 Investment Result

The total investment money available from Week #1 is \$99,300.18, and I invested the money to the seven stocks accordingly. The total cost of buying all the stocks is \$91,672.37, and I had \$8,327.63 left as tangible money before I sold the stocks. I sold some VZ stocks on June 3rd, 2015 because the stock price went down in Week #1. After the dramatic drop of all prices on the first day of Week #2, I sold all the stocks when the stock price went up aggressively on the fourth day of Week #2. Even through some stocks were not making positive profit, I predict the price might drop more in the future. Table 8.2.1 is the transaction of Week #2. The investment result for Week #2 is shown.

Date	Symbol	BUY/ SELL	Price	Share	Net Cost/Proceeds	Profit/Loss	Total Cash	Total Profit
6/2/15							\$100,000.00	
6/2/15	CTSH	BUY	\$65.90	520	\$34,268.00		\$65,732.00	
6/10/15	CTSH	SELL	\$65.23	520	\$33,919.60	-\$348.40	\$99,651.60	-\$348.40
6/2/15	DOX	BUY	\$56.22	251	\$14,111.22		\$85,540.38	
6/11/15	DOX	SELL	\$56.78	251	\$14,251.78	\$140.56	\$99,792.16	-\$207.84
6/2/15	EMC	BUY	\$26.73	301	\$8,045.73		\$91,746.43	
6/11/15	EMC	SELL	\$27.32	301	\$8,223.32	\$177.59	\$99,969.75	-\$30.25
6/2/15	ORCL	BUY	\$43.81	214	\$9,375.34		\$90,594.41	
6/11/15	ORCL	SELL	\$44.30	214	\$9,480.20	\$104.86	\$100,074.61	\$74.61
6/2/15	SYMC	BUY	\$24.67	136	\$3,355.12		\$96,719.49	
6/11/15	SYMC	SELL	\$23.82	136	\$3,239.52	-\$115.60	\$99,959.01	-\$40.99
6/2/15	VZ	BUY	\$48.27	286	\$13,805.22		\$86,153.79	
6/3/15	VZ	SELL	\$49.14	200	\$9,828.00	\$174.00	\$95,981.79	\$133.01
6/11/15	VZ	SELL	\$47.83	86	\$4,113.38	-\$37.84	\$100,095.17	\$95.17
6/2/15	GIB	BUY	\$42.29	206	\$8,711.74		\$91,383.43	
6/11/15	GIB	SELL	\$42.63	206	\$8,781.78	\$70.04	\$100,165.21	\$165.21

Table 8.2.1 Swing Trading Transaction Chart in Week #2

Overall, the Swing Trading method is making positive profit throughout Week #1 and Week #2. However, some stock prices were higher when I brought the stocks in Week #1, so I decided to sell the stocks as the stock price increases after a huge decrease in Week #2.

8.2.2 Week #2 Gain/Loss Conclusion

I started the simulation with \$99,300.18 from Week #1, and I have \$100,165.21 as total cash left by the end of Week #2 simulation. The profits of Week #2 are \$165.21, which is higher than the result of Day Trading method.

8.3 SIMULATION WEEK #3 RESULT

8.3.1 Investment Result

The total investment money available from Week #2 is \$100,165.21, and I invested the money to the seven stocks almost evenly. I brought the stocks on the first day of Week #3 because the prices are lower than the close prices in Week #2. I sold all my stocks on June 18th, 2015 because the stock price would always go down on the fourth day of the week in Week #1 and Week #2. Even through ORCL stock drops aggressively on the fourth day of Week #3, I still make positive returns in Week #3, and the prices of stocks go down in the end of fourth day of Week #3.

Table 8.3.1 is the transaction of Week #3. The investment result for Week #3 is shown.

Date	Symbol	BUY/ SELL	Price	Share	Net Cost/Proceeds	Profit/Loss	Total Cash	Total Profit
6/15/15							\$100,165.21	
6/15/15	CTSH	BUY	\$62.77	300	\$18,831.00		\$81,334.21	
6/18/15	CTSH	SELL	\$63.42	300	\$19,026.00	\$195.00	\$100,360.21	\$195.00
6/15/15	DOX	BUY	\$55.61	280	\$15,570.80		\$84,789.41	
6/18/15	DOX	SELL	\$56.27	280	\$15,755.60	\$184.80	\$100,545.01	\$379.80
6/15/15	EMC	BUY	\$26.51	301	\$7,979.51		\$92,565.50	
6/18/15	EMC	SELL	\$27.40	301	\$8,247.40	\$267.89	\$100,812.90	\$647.69
6/15/15	ORCL	BUY	\$43.55	251	\$10,931.05		\$89,881.85	
6/18/15	ORCL	SELL	\$41.20	251	\$10,341.20	-\$589.85	\$100,223.05	\$57.84
6/15/15	SYMC	BUY	\$23.49	278	\$6,530.22		\$93,692.83	
6/18/15	SYMC	SELL	\$24.49	278	\$6,808.22	\$278.00	\$100,501.05	\$335.84
6/15/15	VZ	BUY	\$47.06	286	\$13,459.16		\$87,041.89	
6/18/15	VZ	SELL	\$47.70	286	\$13,642.20	\$183.04	\$100,684.09	\$518.88
6/15/15	GIB	BUY	\$41.95	200	\$8,390.00		\$92,294.09	
6/18/15	GIB	SELL	\$41.52	200	\$8,304.00	-\$86.00	\$100,598.09	\$432.88

Table 8.3.1 Swing Trading Transaction Chart in Week #3

Overall, the Swing Trading method is making positive profit throughout three weeks so far. However, stock prices changes every day, so I pay close attention to daily changes and overall changes.

8.3.2 Week #3 Gain/Loss Conclusion

I started the simulation with \$100,165.21 from Week #2, and I have \$100,598.09 as total cash left by the end of Week #3 simulation. The profits of Week #3 are \$432.88, which is the highest returns regarding both the results of Swing Trading method and Day Trading method.

8.4 SIMULATION WEEK #4 RESULT

8.4.1 Investment Result

The total investment money available from Week #3 is \$100,598.09, and I invested the money to the seven stocks almost evenly. I brought most stocks on the last day of Week #3 because most prices reached their lowest price by the end of Week #2. I sold my stocks based on each stock's performance in Week #4 because each of them does not perform the same in Week #4. I only gained negative profit from ORCL stocks, which is -\$49.50, and other stocks are making positive returns. Especially, CTSH and GIB stocks have great returns, which are \$604.00 and \$333.60 in Week #4. Table 8.4.1 is the transaction of Week #4. The investment result for Week #4 is shown.

Date	Symbol	BUY/ SELL	Price	Share	Net Cost/Proceeds	Profit/Loss	Total Cash	Total Profit
6/22/15							\$100,598.09	
6/19/15	CTSH	BUY	\$62.54	400	\$25,016.00		\$75,582.09	
6/25/15	CTSH	SELL	\$64.05	400	\$25,620.00	\$604.00	\$101,202.09	\$604.00
6/19/15	DOX	BUY	\$56.27	300	\$16,881.00		\$84,321.09	
6/23/15	DOX	SELL	\$56.44	300	\$16,932.00	\$51.00	\$101,253.09	\$655.00
6/19/15	EMC	BUY	\$27.06	350	\$9,471.00		\$91,782.09	
6/24/15	EMC	SELL	\$27.68	350	\$9,688.00	\$217.00	\$101,470.09	\$872.00
6/22/15	ORCL	BUY	\$41.72	330	\$13,767.60		\$87,702.49	
6/25/15	ORCL	SELL	\$41.57	330	\$13,718.10	-\$49.50	\$101,420.59	\$822.50
6/22/15	SYMC	BUY	\$23.72	300	\$7,116.00		\$94,304.59	
6/25/15	SYMC	SELL	\$24.21	300	\$7,263.00	\$147.00	\$101,567.59	\$969.50
6/19/15	VZ	BUY	\$47.44	250	\$11,860.00		\$89,707.59	
6/23/15	VZ	SELL	\$47.95	250	\$11,987.50	\$127.50	\$101,695.09	\$1,097.00
6/19/15	GIB	BUY	\$40.55	278	\$11,272.90		\$90,422.19	
6/22/15	GIB	SELL	\$41.75	278	\$11,606.50	\$333.60	\$102,028.69	\$1,430.60

Table 8.4.1 Swing Trading Transaction Chart in Week #4

8.4.2 Week #4 Gain/Loss Conclusion

I started the simulation with \$100,598.09 from Week #3, and I have \$102,028.69 as total cash left by the end of Week #4 simulation. The profits of Week #4 are \$1,430.60, which becomes the highest returns regarding both the results of Swing Trading method and Day Trading method.

8.5 SIMULATION WEEK #5 RESULT

8.5.1 Investment Result

The total investment money available from Week #4 is \$102,028.69, and I invested the money to the seven stocks accordingly. I brought most stocks on the first day of Week #5 because I sold all of my stocks by the end of Week #4. I sold my stocks based on each stock's performance in Week #5 because each of them does not perform the same in Week #5. I made most of my profits from EMC stock, but all the stocks did not perform as well as Week #4. Therefore, the total profits are not as high as the profits made in Week #4. Table 8.5.1 is the transaction of Week #5. The investment result for Week #5 is shown.

Date	Symbol	BUY/ SELL	Price	Share	Net Cost/Proceeds	Profit/Loss	Total Cash	Total Profit
6/29/15							\$102,028.69	
6/29/15	CTSH	BUY	\$61.90	245	\$15,165.50		\$86,863.19	
7/1/15	CTSH	SELL	\$62.01	245	\$15,192.45	\$26.95	\$102,055.64	\$26.95
6/29/15	DOX	BUY	\$55.57	300	\$16,671.00		\$85,384.64	
7/2/15	DOX	SELL	\$55.59	300	\$16,677.00	\$6.00	\$102,061.64	\$32.95
6/29/15	EMC	BUY	\$26.21	300	\$7,863.00		\$94,198.64	
7/2/15	EMC	SELL	\$26.51	300	\$7,953.00	\$90.00	\$102,151.64	\$122.95
6/29/15	ORCL	BUY	\$40.62	200	\$8,124.00		\$94,027.64	
7/2/15	ORCL	SELL	\$40.37	200	\$8,074.00	-\$50.00	\$102,101.64	\$72.95
6/29/15	SYMC	BUY	\$23.53	240	\$5,647.20		\$96,454.44	
7/1/15	SYMC	SELL	\$23.33	240	\$5,599.20	-\$48.00	\$102,053.64	\$24.95
6/29/15	VZ	BUY	\$47.44	250	\$11,860.00		\$90,193.64	
7/2/15	VZ	SELL	\$47.36	250	\$11,840.00	-\$20.00	\$102,033.64	\$4.95
6/29/15	GIB	BUY	\$39.83	200	\$7,966.00		\$94,067.64	
7/2/15	GIB	SELL	\$39.91	200	\$7,982.00	\$16.00	\$102,049.64	\$20.95

Table 8.5.1 Swing Trading Transaction Chart in Week #5

8.5.2 Week #5 Gain/Loss Conclusion

I started the simulation with \$102,028.69 from Week #4, and I have \$102,049.64 as total cash left by the end of Week #5 simulation. The total profits made in Week #5 are \$20.95, which

is the lowest returns regarding both the results of Swing Trading method and Day Trading method throughout the whole simulation process.

9. Comparison

I ran the five-week stock market simulation by using two trading strategies, which are Day Trading method and Swing Trading method. By comparing the simulation results of Day Trading and Swing Trading from a standpoint that the method is easy and efficient to apply in reality, the Swing Trading is more useful and practical to apply in real stock market. Even though Day Trading method is an entry strategy for beginners to make profits by leveraging large amounts of capital to take advantage of small price movements in high liquid stocks or indexes, traders would not make profits if they do not have sharp insight and sense of stock market. In addition, the Day Trading method requires traders to make quick decisions all the time because the stock prices change in every minute and it is difficult to accurately analyze the trend of stock price within minutes. The other drawback of Day Trading method is that I had to watch the stock prices every minute because I had to decide when to sell and buy shares within a day. Therefore, the Day Trading method is not a practical and effective trading method for real trading practice.

On the other hand, Swing Trading is easier to manage for entry level traders because it does not require immediate reaction based on the change of stock prices. Also, traders are able to collect and analyze trends of stock prices before they make any transactions. According to the easiness and accuracy of predicting trends of stock prices, Swing Trading strategy catches relatively more effective information than Day Trading strategy. From the final net profit earned in this IQP, Simulation II by applying Swing Trading method gained more profits than Simulation I which Day Trading method was applied.

10. Conclusion

Based on the net profits earned by the trading method in this stock market simulation, the results of the simulation have met the objectives of my IQP, which is to develop fundamental understanding of stock market and investment concepts. I have developed solid understanding of trading methods and stock trends through my five-week stock market trading simulation as well as the ability to make quick decisions with limited information about the stocks.

The stock market simulation result of Day Trading is successful from an investment standpoint, and I made \$1,960.68 for net profit by the end of the Day Trading simulation. Since the stocks I picked for this IQP are from technology and telecommunication industries, the stocks prices are heavily impacted by daily news and social media information. So the stock prices can fluctuate aggressively within a day. However, the result of Swing Trading simulation is more effective and realistic, and the net profit of Swing Trading simulation is \$2,049.64. Even though the net profits of Day Trading simulation and Swing Trading simulation are close, the usefulness and easiness of applying these two trading methods are distinctive.

From my simulation results, I am able to conclude that the Swing Trading methodology is a more effective trading technology between the two trading strategies I have chosen to apply in the simulation process. I think the strengths of using Swing Trading method for trading stocks would be more evident given more time because the trend of stock prices is easier to capture in a longer timeline.

At the end of the stock market simulations, I gained trading and investment experience from this project. I put a significant amount of time and efforts to do research on investment and trading as well as to analyze stocks in my portfolio. It is satisfying to gain positive net profits in

the end, and this experience truly broadens my investment knowledge and equips me to become a more skilled investor in the future.

References

1. Bramble, Laura. How the Stock Market Was Started & by Whom. Chron. Demand Media. 22 May 2015. <<http://smallbusiness.chron.com/stock-market-started-whom-14745.html>>.
2. History of the New York Stock Exchange. The Library of Congress. Ed. Ellen Terrell. Business Reference Services, May 2004. 22 May 2015. <http://www.loc.gov/rr/business/hottopic/stock_market.html>.
3. Beattie, Andrew. The Birth Of Stock Exchanges. Investopedia. 22 May 2015. <<http://www.investopedia.com/articles/07/stock-exchange-history.asp>>.
4. Investopedia Staff. The NYSE And Nasdaq: How They Work. Investopedia. 22 May 2015. <<http://www.investopedia.com/articles/basics/03/103103.asp>>.
5. Stocks. Investor.gov. U.S. Securities and Exchange Commission. 22 May 2015. <<http://investor.gov/investing-basics/investment-products/stocks>>.
6. Wong, Kristin. The Many Different Types of Investments, and How They Work. Two Cents. 05 Feb. 2015. 22 May 2015. <<http://twocents.lifehacker.com/the-many-different-types-of-investments-and-how-they-w-1683582510>>.
7. Investopedia. 2015. Investopedia, LLC. 22 May, 2015. < <http://www.investopedia.com/>>.
8. Harper, David. Forces That Move Stock Prices. Investopedia. 22 May 2015. < <http://www.investopedia.com/articles/basics/04/100804.asp>>.
9. Yahoo Finance. 2015. Yahoo! Inc. 22 May 2015. < <http://finance.yahoo.com/>>.
10. CNN Money. 2015. Cable News Network. 15 Jun. 2015. < <http://money.cnn.com/>>.